REPUTATION INCONGRUENCE AND PREFERENCE OF STAKEHOLDERS:

CASE OF MBA PROGRAMS

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ABSTRACT

In this paper, I examine the effect of an organization's multi-dimensional reputation on the external stakeholders' preference for an organization in the notions of reputation incongruence. I propose that an organization's incongruent reputation, or large variations among the reputations of each dimension, can be an unfavorable signal to its stakeholders based on theoretical ideas that claim reputation incongruence induces the ambiguity and risk of an organization perceived by stakeholders. I also investigate the moderating effect of reputation incongruence by positing that this incongruence may nullify the influences of reputation dimensions on the preferences of stakeholders. These propositions about reputation incongruence is empirically examined in the context of MBA programs of the global business schools which have three dimensions of reputation – career development, globalization, and research performance.

INTRODUCTION

Acquiring reputation as an intangible asset (Weigelt & Camerer, 1988) is one of the most critical missions for firms to increase their profits and mitigate their potential risks (Höner, 2002; Ponzi, Fombrun & Gardberg, 2011). In the organizational science field, there have been consistent findings proving the benefits of organizational reputation that lead to an organization's performance (cf. Fombrun, 1996), which emphasizes the organizational reputation as a valuable, exceptional, and unique resource (Boyd, Bergh, & Ketchen, 2010), and an important strategic asset (Barnett, Jermier & Lafferty, 2006). In short, the reputation functions as a signal providing information about the quality of products and services to consumers (Spence, 1973), leading to the premium price of the reputable organization (Shapiro, 1983). Furthermore, this reputable organization can establish a trustworthy and reliable image (Ganesan, 1994) and a transparent communication channel (Banks, Hutchinson, & Meyer, 2002) to their key stakeholders. Therefore, the organization that is favorably perceived by key stakeholders can have the more opportunities of hiring talented people (Gatewood, Gowan, & Lautenschlager, 1993), networking with reputable partners and clients (Dollinger et al., 1997), and obtaining external funding resources (Shane & Cable, 2002) as well as charging a premium for its products and services (Shapiro, 1983).

To deepen the understanding about how an organization can utilize this important asset (i.e. organizational reputation), this study particularly focuses on the multidimensionality of the organizational reputation, which is suggested by Fombrun and Shanley's (1990) seminal work. An organization's reputation involves the diverse collection of dimensions (Fombrun & Shanley, 1990), which means that the key stakeholders of an organization can evaluate the organization's reputation under various evaluation criteria. For example, symphony orchestras usually have two competing but equally important value dimensions: artistic performance and a popular appealing operation (Glynn, 2000). An orchestra's reputation, for example, may be evaluated under these two distinct dimensions; and it is possible that the orchestra has a decent reputation under both criteria, but it is also possible that the orchestra is highly renowned for its artistic performance but infamous for its inhospitable service to audiences and the abstruseness of the performance programs, and vice versa.

However, the previous frameworks investigating the impacts of this multidimensional reputation provides a limited scope focusing on the individual value of each reputation dimension rather than the composition among each dimension as Dollinger, Golden and Saxton (1997) state "If reputation is multidimensional, researchers should be able to manipulate dimensions independently in decision-making framework." (p. 128) McGuire, Alison and Schneeweis (1988), for example, concentrate on one dimension of organizational reputation, corporate social responsibility, and analyze the relationships between the reputation of corporate social responsibility and actual financial performance of companies. In the following study by McGuire, Scheeweis, and Branch (1990), the main focus is still the independent association of each reputation dimension (e.g., quality of management, quality of product, innovation, and social responsibility) to financial performance, instead of the composition among the dimensions and its influence. Even when previous literature attempts to combine various individual reputation dimensions into an integrative framework, researchers merely aggregate the individual value of each dimension in order to profile an organization's overall reputation (e.g., Fombrun & Shanley, 1990; Pfarrer, & Rindova, 2010). Fombrun and Shanley (1990), for instance, relies on a single index of overall reputation calculated from nine reputation dimensions to investigate the relationship between the overall organizational reputation and financial performance.

Although these previous studies are good starting points toward understanding the multidimensionality of reputation, there is the lack of comprehensive framework integrating the impact of individual dimensions (Rhee & Valdez, 2009) since just averaging or separating each dimension may not be able to fully capture the dynamic of the multidimensionality of reputation. In order to fill this lacuna of previous studies, this study turns focus to the portfolio or composition of reputation dimensions. Thus, I investigate the question of which patterns of a multidimensional reputation portfolio or composition can be perceived as favorable signals to key stakeholders, resulting in the desirable outcomes of firms.

Multi-attributes profiles such as organizational reputation can be described by two parameters, *elevation*, the perceived value calculated from each attribute, and *scatter*, the internal variability of the attribute values around the profile mean (Cronbach & Gleser, 1953; Ganzach, 1995). The elevation can incorporate the individual value of each reputation dimension, and the scatter can refer to variations among these individual values. While previous research already has shown the significant relations between good reputation and its positive consequences (e.g., McGuire, Alison, & Schneeweis, 1988; Schnietz & Epstein, 2005; Fombrun & Shanley, 1990), which can be understood under the concept of the elevation of each dimension, the scatter among reputation dimensions is not yet to be explored and discovered.

Thus, the first step of developing the framework for multidimensional reputation is to introduce the concept of reputation incongruence that denotes the incongruence or conflicts between the information reflected in each reputation dimension (i.e. scatter). According to this definition of the scatter, an organization with good reputation in some dimensions and poor reputation in others can be described as an organization with incongruent reputation. Based on a variety of decision-making theories and reputation studies, I suggest that this reputation incongruence may function as a negative signal to key stakeholders because this incongruence tends to be associated with the ambiguity (Ganzach, 1995; Ocana, 2008) and high risk (Jagannathan & Ma, 2003; Jorion, 1985) of an organization, leading to the unfavorable reaction of stakeholders against the organization. Sensemaking theory also supports the negative effect of reputation incongruence because the discrepancy among the value of reputation dimensions can provoke stakeholders' broken sense about the reputation of an organization (Ashforth, Harrison & Corley, 2008; Chun, 2005). In other words, stakeholders may find ambivalent information from an organization showing fairly good reputation in one dimension while considerably poor in another, experiencing cognitive dissonance that leads to unfavorable perception about the organization having this reputation incongruence (Pratt, 2000).

I also argue that there is the moderating effect of reputation incongruence on the effect of each reputational dimension's elevation by positing that the influences of reputation dimensions (i.e. the elevation) can be discounted by the reputation incongruence (i.e., the scatter). The reputation incongruence may reduce the reliability and importance of information about the elevation (Baker & Petty, 1994; Maheswaran & Meyers-Levy, 1990; Ocana, 2008), so that stakeholders are likely to reduce the use of this unreliable information derived from the reputation.

While including the positive effect of each reputational dimension that is discussed by the previous literature, my study proposes the negative effect of reputation incongruence among these dimensions on the preference of stakeholders, as well as the moderating effect of reputation incongruence on each dimension. These propositions will be tested in the context of global MBA programs that provides an appropriate landscape for this study because the reputation of the programs reflected in the media ranking systems is the most important reference information for the key stakeholders, like prospective students and employers (Peters, 2007). In addition, some media report the rankings of sub-dimensions as well as the overall rankings of each program (more details can be found in the empirical context section).

I expect that this study can contribute to organizational reputation research by establishing theoretical arguments for the integrative model of multidimensional reputation. With the comprehensive and integrative framework suggested by this study, researchers who want to capture a whole picture of an organization's reputation can use both individual notches of each reputation dimension and variations among these individual scores (i.e. reputation incongruence), and also can incorporate the interaction effect between the elevation and the scatter of reputation dimensions. The specific question of this study is whether an MBA program with a dominant reputation dimension (e.g., research performance) but with a relatively underestimated other dimensions (e.g., globalization and career development) is favorably perceived by prospective students and recruiters or not. Furthermore, this study is expected to initiate future research combined with the broader range of academic and managerial topics such as the multi-stakeholder view and resource allocation theory. In addition, I expect this framework can guide managers who need to compose the reputation portfolio of their organization and to cope with various reputation dimensions.

CONTEXT

The empirical context of this study is global business schools providing full-time MBA programs. These MBA programs are evaluated by a variety of media that are the critical information sources for prospective students considering their career development from the MBA programs and recruiters seeking the professionally trained job candidates' pool (Argenti, 2000; Sauder & Fine, 2008). *MBA Magazine* can be considered as the seminal work of ranking the MBA programs in the late 1970s, but the publication has been discontinued. Then, *US News & World Report* and *Business Week* joined the fray in 1980s, and *Financial times* arrived on this scene in the late 1990s. In the 2000s, *Forbes*, *The Wall Street Journal*, and *The Economist* have started to report the rankings of MBA programs as well. These media rankings are used by consumers (i.e. prospective students and recruiters) as the valuable information representing the reputation of MBA programs (Argenti, 2000; Pfeffer & Fong 2004).

From this phenomenon of flooding ranking systems, Argenti (2000) identifies that the rankings can "affect(s) business schools more than any other industry" (p.171). He also states that any business school dean in the world would consider the rankings as the most critical drive of the school's reputation than any other single factor because of the enormous effect of rankings on student admissions and job placements. There is also a pressure that business schools should build a high reputation because of their position within their parent universities (Argenti, 2000) since the business schools, especially their MBA programs, serve as a cash cow for the parent systems of universities who are currently experiencing increasing difficulty in obtaining cash from the public purse like government funding (Starkey, Hatchuel, & Tempest, 2004). To supplement the deficiency in public funding, the universities incrementally stress the financial resources from the private sectors, such as the tuition of MBA students and the endowment from employers. This important 'financial' role of business schools for their parent organizations makes most business schools obsessed by the media ranking that works as the caliber of reputation signaling the quality of MBA programs and attracting key stakeholders (Hsu, James, & Chao, 2009; Policano, 2005; Sauder & Fine, 2008). A prevailing phenomenon exhibiting this fixation on media rankings in this market of MBA programs can be found in the web sites of the MBA programs. Most MBA programs ranked in the media seem post their recent rankings on the 'about us' section in their web pages. Kenan-Flagler Business School especially links its reputation and media ranking with the statement "Rankings are one measure of reputation, and UNC Kenan-Flagler is consistently ranked among the best business schools in the world" (see Figure 1). It is also easy to witness the effort of many business schools that want to improve the 'rankings' reported by the media. For example, the University of Chicago hired marketing specialists to handle on the media affecting the preference of stakeholders. Many business schools are also consulting external experts in public relations to improve their reputation reflected in the ranking systems (Argenti, 2000).

Figure 1. An example of ranking information on the web-site of MBA programs (Kenan-Flagler Business School, the screen captured in 2013 on http://www.kenan-flagler.unc.edu/about/rankings)

Corley and Gioia (2000) figuratively describe the MBA programs' competition for reputation as a *ranking game*. They postulate this game of rankings has four rules: "You must play the game" (p. 323), "Once you are in the game, you cannot quit" (p. 323) without serious consequences, "The criteria for the rankings can change without notice" but a protest is futile and business schools have to follow the new system (pp. 323-324), and "You can't really win this game (but you still have to look like you are trying)" (p. 324). These rules imply that the ranking systems exert inevitable social pressures on the MBA programs, resulting in their obsession with the rankings.

Regarding to the topic of reputation, the most relevant answer for "Why are the media rankings in this industry such important?" may be that the key stakeholders (i.e. prospective students and recruiters) are seriously using the media rankings to identify the quality of the programs. The Graduate Management Admission Council conducted the Global MBA Survey in 2001 and confirmed that the 95 percent of MBA students responded that school rankings had more influence on their decision-making process during the application process and the enrollment to their current schools compared to any other factors (Tyson, 2001). Another key stakeholder group, recruiters, also uses media rankings as a critical information source and prefers the graduates from highly ranked schools (Peter, 2007). Media rankings are also used as a filtering tool narrowing down the pool of MBA graduates which is presumably too broad to be covered by recruiters (Wuorio, 2001). Specifically, recruiters can limit their focus on a specific and appropriate dimension of the MBA programs by adopting a job-person fit approach. For example, a school highly ranked in the "international mobility rank" category of *Financial times* can be considered as a school providing the appropriate pool of job candidates for an international marketer. Interviews from 12 schools ranked in the *Financial times* also demonstrate that business schools recognize the intensive influence of media rankings on the application and the enrollment of prospective students (van Roon, 2003). All of these instances support that the rankings serve as vital information reflecting the quality of the business schools for key stakeholders' decision-making.

Although many researchers raise questions about the effectiveness and reliability of information contained in these ranking systems by criticizing the inaccurate and arbitrary methodology of the rankings that can be largely affected by unintended factors (e.g., Corley & Gioia, 2000; Gioia & Corely, 2002; Pfeffer & Fong, 2004), business schools are not yet free from the game of rankings and the stakeholders still rely on the rankings (Corley & Gioia, 2000; Gioia & Corley, 2002). The business schools and their stakeholders' obsession with the school rankings are revealed even when the researchers try to point out the flaws of rankings. For example, the criticism by Pfeffer and Fong (2004) ironically highlights how importantly the MBA programs and the stakeholders concern the reputation reflected in MBA rankings:

> *Alumni strategically inflating their ratings to bolster their schools' reputation – and as a consequence the brand value of their degree – has been alleged (Reingold and Habal, 1998). Recruiters have been enticed to speak more favourably about schools by being provided with better amenities and service as well as help from career placement offices that are expanding their staffs to respond to their customers' needs. Whether better access to students,*

refreshments, and rapid response to phone calls are really a measure of the quality of the educational output is open to debate. (p.1514)

Table 1 summarizes the key features of ranking systems considered as major and trustworthy information sources (cf. Sauder & Fine, 2008). These rankings are designed to provide the information about the quality of each program to the key stakeholders (Saunder & Fine, 2008). On the one hand, all the media report the overall quality of each program reflected in the information of 'overall rankings'. Based on this information, the key stakeholder can infer, generally, the quality of a program, compared to others. On the other hand, only three of these (i.e. *U.S. News & World Report*, *Financial times*, and *The Economist*) separately report the rankings in sub-dimensions. For example, the *Financial times* separately presents each rank in several dimensions such as career progress, aims achieved, placement success, or academic research as shown in Table 2. With these sub-rankings as well as overall ranking, prospective students and recruiters are easily able to gather the comprehensive information from the ranking systems.

Table 1. Key features of major media rankings for MBA programs

	Publication period	Publication term	Reporting range	Sub-rankings categories	Methodology for overall ranking	Information presented
Business Week	1988 to present	Biennially	U.S. Top 50 and Global Top 20*	Not available	Overall rating from survey	Overall ranking, GMAT score, undergraduate GPA, acceptance rate, starting salary, employment rate at graduation, program size, tuition, student body, alumni network
US News & World Report	1990 to present	Annually	U.S. Top 50	Accounting, finance, entrepreneurship, information systems, international, management, marketing, nonprofit, production/operations, supply chain/logistics	Peer assessment score, recruiter assessment score, placement success, staring salary, student selectivity	Overall ranking, sub-rankings, GMAT score, undergraduate GPA, acceptance rate, starting salary, employment rate at graduation, program size, tuition, student body
Financial times	1999 to present	Annually	Global Top 100	Career progress, aims achieved, placement success, alumni recommend, international mobility, international course experience, doctoral rank, research rank	Sub-rankings, pre/post salary, value for money, employed at three months, women faculty/students/board, international faculty/students/board, languages, faculty with doctorates	Overall ranking, sub-rankings, all criteria for evaluation listed in the left column
Forbes	2000 to present	Biennially	U.S. Top 50 and Global Top 50*	Not available	A simple calculation of ROI 5 years out from business school	Overall ranking
The Wall Street Journal	2001 to present	Annually	Top 25 Excutive MBA Programs	Not available	Overall rating from survey	Overall ranking
The Economist	2002 to present	Annually	Global Top 100	Open new career opportunities, personal development and educational experience, increase in salary, potential to network	Identical with the sub-rankings categories listed in the left column	Overall ranking, regional ranking, sub-rankings, cost, facilities, faculty, student body, recruiters/career service, accreditation

*U.S. and global rankings are separately reported.

Table 2. Example of multidimensional ranking system (*Financial times*, 2013)

Rank in 2013	School name	Career progress rank	Aims achieved rank	Placement success rank	International mobility rank	International course experience rank	FT research rank
1	Harvard Business School	5	17	22	43	58	1
2	Stanford Graduate School of Business	2	5	17	56	19	6
3	University of Pennsylvania: Wharton	42	35	30	40	34	2
4	London Business School	10	1	25	2	10	13
5	Columbia Business School	24	49	29	49	56	12
6	Insead	18	25	46	11	5	23
7	Iese Business School	6	9	37	9	6	55
8	Hong Kong UST Business School	48	41	74	25	4	25
9	MIT: Sloan	14	27	24	48	32	4
10	University of Chicago: Booth	63	18	3	61	52	6

Although the various ranking systems have positive and negative aspects , and there is no dominant ranking system considered as an industry standard, the *Financial times* applies the most comprehensive and unbiased methodology (Sauder & Fine, 2008). More importantly, the *Financial times* ranking seems to be a particularly appropriate one for the argument of this study focusing on the multidimensionality of reputation and its impact on the preference of stakeholders. First of all, the *Financial times* seems to provide the most comprehensive information applicable to the interest of both recruiters and prospective students (Christensen, Peirce, Hartman, Hoffman, & Carrier, 2007). It has been well discussed that the stakeholders of MBA programs are interested in the benefits related to career development derived from MBA programs (Argenti, 2000; Vidaver-Cohen, 2007) and related to the adaptive ability to global environment (Altbach & Knight, 2007). The sub-rankings reported by *Financial times* provide the relevant information for these categories. Additionally, *Financial times* is the only ranking system reporting the research related reputation criteria (i.e. doctoral rank and research rank). Compared to career development and international adaptability, the effect of research performance on the perception of the key stakeholders can be doubtful because the prospective students and the recruiters are usually interested in the practical and managerial skills and knowledge rather than academic studies (Safón, 2007). However, the research performance can be a critical resource for improving the quality of MBA programs, as Zimmerman (2001) states that business schools that emphasize the practice of teaching (i.e. MBA programs) are eating seed corn without investment in a sustainable future. Gioia and Corley (2002) restate the importance of the academic research by linking this with media ranking “games”. According to these researchers, media rankings which omit the dimension of academic research performance are intensifying the competition in somehow myopic way, resulting in the superficial effort of training the job-related skills of graduates in a short-term rather than the fundamental contribution of providing deep insights on the business world in a long-term. Thus, there is a possibility that the research related reputation is also can be perceived as a key criterion when the stakeholders involved in the professional field endeavor to identify the overall quality of MBA programs. Compared to other ranking media, using the sub-rankings of *Financial times* may provide the additional benefit of an empirical test for whether the prospective students and the recruiters are actually concerned with the MBA program's reputation in academic research or not.

Second, the *Financial times* applies very consistent evaluation criteria and calculation algorithm over its publication years. This consistency is critical for this study because longitudinal analyses will be employed for empirical tests in this study. As Gioia and Corley (2000) point out, many MBA ranking systems frequently change their criteria, reporting format, and calculation for overall ranking. For example, the biennially published *Business Week* ranking changed its criteria at 2008, 2004, 2002, 2000, and 1998. Its reporting format was also dramatically changed in 2012. Furthermore, some ranking systems alter their reporting range. *U.S. News & World Report* has published top 50 schools in its hard copy while starting to report top 100 schools in its online version since 2008. *Business Week* gradually increases the range of its selection from top 25 in 1998 to top 63 in 2012, as well. Compared to these alternatives, *Financial times* never changed its evaluation criteria with its selection frame of top 100 though there has been little adjustment to its calculation of overall ranking.

Third, the *Financial times* ranking embraces both the U.S. and non-U.S. MBA programs in a single evaluation system. Other contenders, except *The Economist*, report U.S. ranking only or separate U.S. and non-U.S. schools into two different ranking lists. With this ranking media, it is impossible to capture the whole picture of the industry of MBA programs given that the prospect students and the recruiters in various areas in the world consider both U.S. and non-U.S. programs as their candidates (Starkey et al., 2004). In fact, the *Financial times* rankings was driven by the desire of European business schools to redefine the boundaries of the field of management education, largely in response to the needs for evaluating U.S. and non-U.S. MBA programs in one boundary (Wedlin, 2006). Thus, the *Financial times* intentionally groups U.S. and non-U.S. MBA programs into a pool of "global MBA", which makes it possible to equivalently compare these programs.

Finally, the *Financial times* delivers the reputation information to public with more convenient accessibility and user-friendly interface than any other contenders. The web site of the *Financial times Global MBA* ranking offers a variety of the customizable options when reporting its ranking information. Readers can select or deselect featured field, like sub-rankings and student body, to be shown in the table of all the ranked schools in a selected year (cf. *Financial times*, 2013). Additionally, readers can choose "Chart and compare business school" function when they need to narrow the pool of target programs. The ranking information also can be downloaded in various electronic file formats such as Adobe PDF and Microsoft Excel. The web database contains the full archival records from the first year (i.e. 1999) to present, and is open to any users without any monetary charges.

THEORY AND HYPOTHESES

Mechanism of Organizational Reputation

To clarify the conceptual landscape of my study before discussing the multidimensionality of reputation, I will summarize the previous literature explaining the mechanism of organizational reputation leading to organizational performance. Many researchers (e.g., Basdeo et al., 2006; Fombrun, 1996; Fombrun & Shanley, 1990; Shapiro, 1983) suggest that reputation is a *signal* to external stakeholders informing them of the value and the quality of an organization's products, jobs, strategies, and prospects that are comparable with those of their competitors. Then the stakeholders, the receivers of this signal information, habitually use this information in order to decide their investment targets, and their places to work, and the products and the services they will purchase (Dowling, 1986) because the reputation can reduce the cost of the searching efforts of the stakeholders (Stigler, 1962) and the information asymmetry between stakeholders and the organization (Shapiro, 1983). Thus, an organization with a good reputation can easily attract key stakeholders such as talented job applicants (Stigler, 1962) and various investors (Beatty & Ritter, 1986; Milgrom & Roberts, 1986). The preference derived from possessing a good reputation provides a variety of utilizable resources to the reputable organization such as talented employees (Gatewood et al., 1993), favorable relations with reputable partners and clients (Dollinger et al., 1997), abundant external funding resources (Shane & Cable, 2002), and the ability of charging price premium (Shapiro, 1983). Consequently, achieving a favorable reputation results in the successful performance of an organization, in general, by utilizing the preference of various stakeholders (Fombrun & Shanley, 1990). In sum, the preference of stakeholders serves a critical function in this reputation's mechanism leading to organizational performance by linking a favorable signal to organizational performance (see Figure 2).

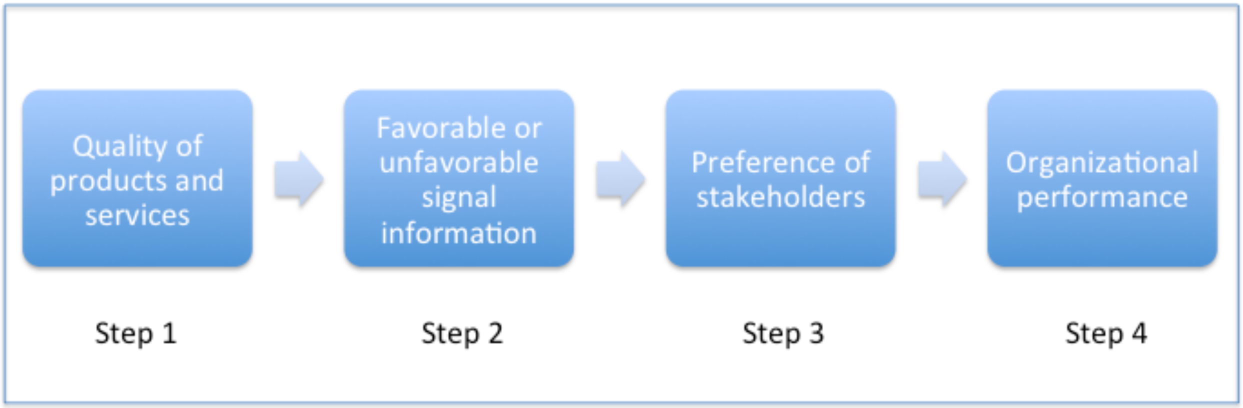

Figure 2. Mechanism of organizational reputation inducing the organizational performance

Multidimensionality of Reputation

A stream of research that is commonly labeled as *a composite view of a multidimensional construct* (Rindova, 2010) focuses on the multidimensionality of organizational reputation based on a postulation that several reputation dimensions can compose an overall reputation of an organization. Weigelt and Camerer (1988) propose that organization reputation is a *set of economic and non-economic attributes* that belong to an organization. Fombrun et al. (1990; 2000) also conceptualize corporate reputation as *a collective construct* consisted of various attributes or dimensions. Then, the researchers create the single index of overall reputation averaged by the scores (i.e. elevations) of multiple dimensions such as quality of management, quality of products or services, long-term investment value, innovativeness, financial soundness, ability to attract, quality of workforces, social responsibility, and efficient usage of corporate assets. Many academic studies (e.g., Pfarrer et al., 2010; Walsh & Beatty, 2007) and media ranking systems (e.g., *Financial times Global MBA rankings* and *Fortune World's Most Admired Companies)* in this stream use composite measures constituted of the multiple reputation dimensions in order to report overall rankings indicating an organization's general attribute perceived by key stakeholders. This perspective suggests that each reputation dimension works as sub-attributes that contribute to establishing the single and general attribute (i.e., an overall reputation), so that the overall reputation may be interpreted as the aggregated (or composite) evaluation on each dimension's distinct quality.

This research stream is also explicitly reflected in the empirical context of my study. Three of six ranking systems in Table 1 (i.e. *U.S. News & World Report, Financial times*, and *The Economist*) generate an overall ranking by considering sub-dimensions of the MBA programs' reputation by following the perspective of multi-dimensional reputation. For example, the *Financial times'* reputation index for the overall ranking is formed from survey ratings and objective data in terms of the programs' multiple dimensions such as career progress, aims achieved, placement success, alumni recommend, international mobility, international course experience, doctoral rank, and research rank (*Financial times*, 2013). The *Financial times* reflects the evaluations of all these reputation dimensions when deciding the overall rankings of programs' reputations. On the contrary to the composite measurement based on the multi-dimensional view on organizational reputation, other three ranking systems (i.e. *Business Week*, *Forbes*, and *The Wall Street Journal*) gather information about stakeholders' overall perception (e.g., survey asking overall satisfaction levels of two core stakeholders in *Business Week*'s methodology) or an objective data on the overall performance of an MBA program (e.g., the simple calculation of graduates' increased salary adjusted by the total tuitions they paid in *Forbes*' methodology) to report an overall reputation of the program. This methodology is aligned with the perspective of *a single and general construct* of reputation excluding the concept of the multidimensionality in an organizational reputation. Some previous studies adopting this definition of "a general organizational attribute" posit that the overall reputation is "imbued with a single, corporeal and monolithic quality" of an organization (Cornelissen & Thorpe, 2002: 174), which means that a single measurement of overall quality can represent the construct of the organizational reputation.

The multi-dimensional view on organizational reputation seems to have a significant advantage over the single construct view by providing the opportunity of examining the effect of reputation portfolio constituted by multiple dimensions. In fact, this study would not be able to argue an integrative and comprehensive framework of reputation portfolio by adopting the concept of the scatter if the organizational reputation were not understood in the perspective of multidimensionality. Likewise Ganzach (1995) was able to examine that the effect of the scatter by introducing the concept of multi-attribute construct consisted of multiple attributes. Nevertheless, few studies seem to sufficiently utilize this potential benefit of multi-dimensional view drawing the various patterns of composition among reputation dimensions (i.e. reputation portfolio). At the most, a few researchers were interested in the dyadic relationships between dimensions. For example, Barney (1991), and Roberts and Dowling (2002) conceptualize the composition of multi-dimensional reputation as an organization's general attribute whose overall rating (i.e. elevation) can be influenced by the *interactions and interrelationships* between multiple attributes. In the same manner, Dollinger et al. (1997) reveal the positive effect of a good reputation in one dimension on a poor reputation in another dimension based on the mechanism of spillover or the halo effect, leading to successful performance of an organization. These researchers additionally suggest that a poor reputation in one dimension can bring down the rating of another reputable dimension, obstructing an organization to build a reputable overall reputation. These previous studies investigating a dyadic interaction between two reputation dimensions still restrict the full potential of benefit from the multi-dimensional view by omitting the composition of various dimensions in the studies.

To overcome this limitation, my study turns the focus to the reputation portfolio that can be determined by the elevation and the scatter of the dimensions. In other words, I propose that individual reputation dimensions determine the favorability of reputation portfolio in two aspects: (1) by informing how good the organizational reputation in general is (2) and how large the variation among the elevations of dimensions is. Especially, including the concept of the scatter (i.e. variance) is expected to provide more comprehensive research framework for the reputation portfolio than a framework with the elevation along because the scatter involves a pattern among various dimensions. Based on the both concepts, I examine the effects of a reputation portfolio on the preference of the stakeholders.

Effect of Elevation on the Preference of Stakeholders

As the first step of constructing a framework explaining the effect of reputation portfolio, I discuss the effect of elevation by proposing that the overall favorability of an organization (or its products and services) can be determined by the elevation of each reputation dimension. According to the literature postulating the multidimensionality of an organizational reputation (cf. Fombrun & Shanley, 1990), each reputation dimension composes the aggregated elevation of multi-dimensional reputation. For example, some media rankings for MBA programs provide a multi-dimensional ranking system, and the stakeholders can infer whether a program is generally good or bad by aggregating the elevation of each dimension (or by just using the already-calculated overall rankings). My study particularly highlights the influence of this aggregated elevation on *the preference of stakeholders*.

Because of the intuitive logical linkage between the favorable signal (or the high elevation) of reputation and the increased preference of stakeholders, previous literature seems to comfortably assume that a favorable signal *inherently* evokes the stakeholders' favorable reaction (e.g. Fombrun & Shanley, 1990; Boyd et al., 2010; Rindova et al., 2005). For example, Rindova et al. (2005; 2010) argue that a good quality perceived by stakeholders (i.e. a favorable signal) directly refers to the increased preference of stakeholders (i.e. a positive reaction). However, a clear examination about this linkage is needed because the preference of stakeholders is a separate and follow-up step involving behavioral reactions after receiving the signal. In other words, the linkage is a transition from information to behavior. For instance, the preference can be revealed by behavioral reaction such as the willingness to select an option (Ganzach, 1995), the actual selection of an option (Feldstein, 1969), the decision of social connection with an organization (Francés-Gómez & Del Rio, 2008), and the actual amount of investment (e.g., time and money) to an option (Okada & Hoch, 2004). In the empirical context of my study, the preference of the two stakeholder groups is also observable in their behaviors. The preference of prospective students, the reaction to the reputation of programs, may be represented by their application behaviors. For example, the prospective students can reveal their preference by applying to the reputable program. When it comes to another key stakeholder group, recruiters or employers, the preference of this group may be revealed in their recruiting behaviors such as the amount of offered salary. This stakeholder group is willing to offer a competitive salary to the graduates from the reputable schools to attract the graduates (Argenti, 2000). Thus, examining the preference of stakeholders is additionally beneficial to empirical studies because of the behaviors that are expressed which reflect their preference.

To summarize, my study dwells upon whether the receiver is actually attracted by the positive signal from the sender. In the notion of multidimensionality, I specifically propose that the favorability of a signal represented by an *aggregated elevation* of reputation dimensions can become a favorable/unfavorable signal; and stakeholders may correspondingly react to this favorable/unfavorable signal by revealing their increased/decreased preference about the signal with their observable behaviors. The context of MBA rankings enables this investigation with the clear distinction between these two steps (i.e. a favorable signal and then the preference). The ranking systems report the elevation of each MBA program's reputation, which is conceptually aligning to the concept of a favorable signal. Basically, the elevation is *information* about the underlying quality of an organization as it is defined as "how good an organization's reputation is" in this study. For example, the career progress ranking in the *Financial times* is a signal reflecting a program's performance of enhancing the graduates' "the level of seniority and the size of the company alumni" (*Financial times*, 2013). If a program is ranked highly in this reputation dimension, this indicates that the program sends a favorable signal or high elevation about this dimension. As reactions to this signal, prospective students can reveal their preference with application behaviors while employers react with recruiting behaviors. An experimental study by Fox, Hayes, and Shogren (2002) also clearly distinguishes these two steps to examine the influence of a favorable/unfavorable description (i.e. signal) about a product on the willingness-to-pay of consumers (i.e. preference). Thus, I hypothesize:

Hypothesis 1: High overall elevation of reputation may induce the preference of stakeholders.

Meanwhile, the individual effect of each dimension on the preference of the stakeholders should not be ignored as well as the aggregated effect proposed in hypothesis 1 because the stakeholders are able to separately identify the distinct dimensions, and also try to interpret the composite pattern of the dimensions based on the identified individual elevations (Dollinger et al., 1997). Thus, my study includes the independent effect of reputation dimensions on the preference of stakeholders as a component (i.e. elevation) of the reputation portfolio in the later analysis section, as well as the aggregated effect of each dimension. In fact, some studies examine the independent and separate influences of the dimensions on the performance of an organization (Rindova et al., 2005; Schnietz & Epstein, 2005; Thang & Tan, 2003). In other words, the reputation dimensions serve as the distinct signals indicating the underlying quality of the specific attributes. For example, Schnietz and Epstein (2005) specify the social responsibility of an organization as a reputation dimension signaling the degree of *social performance* to the key stakeholder, which is distinguishable from their financial performance. There is also an interesting case in the MBA rankings showing this individual effect of each dimension. The *F1GMAT* web site is a virtual community for prospective students who want to gather information about MBA programs (F1GMAT, 2013). This web site publishes a series of "Business School Research" comparing two rival schools in the terms of various dimensions. The following example seems to encourage the information receiver to separately interpret the elevation of various attributes:

> *For Experiential learning at Functional level, Booth offers better options with Lab Courses while Wharton looks at Leadership development as an integral part in all courses. Booth has a larger partner network for exchange programs but Wharton offers a better International Learning Experience through Global Projects. Wharton has a larger Alumni Network but in terms of reach, diversity and effectiveness, Booth has a slight advantage. (F1GMAT, 2013)*

Effect of Scatter: Reputation Incongruence

The degree of scatter is another essential parameter determining the portfolio of multidimensional reputation. To articulate the mechanism of this parameter in the context of reputation research, I introduce the new concept of *reputation incongruence* defined as the large variance among the values of reputation dimensions. Robert H. Smith business school at University of Maryland may be a typical example of an organization with reputation incongruence as the *Financial times*' 2011 report shows that this school's ranking in academic research is relatively high, #10, whereas its job-related rankings are quite low (e.g., ranked #69 in career progress dimension, #76 in aims achieved dimension, and #60 in placement success dimension). This incongruence in reputation is signal information reflecting an organization has the mixture of pros and cons in tandem as Robert H. Smith business school is likely to be perceived as a school good at research but poor at career development for graduates. Ganzach (1995) also specifies this mixture of positive and negative dimensions in one option by the terms of "higher variance in attribute values", which corresponds to the concept of reputation incongruence. In the following sections, I identify the drawbacks of this reputation incongruence in the two aspects of ambiguity: an *inaccurate prediction* and a *conflicting signal*.

Reputation incongruence as an inaccurate prediction

I propose the increased *ambiguity* of the signal from an organization's reputation as the major drawback of reputation incongruence based on the argument that stakeholders may have difficulty in estimating the overall quality of an organization from the ambiguous signal showing reputation incongruence. In other words, because reputation incongruence is a mixed signal including both positive and negative elevations, it is not clear whether this signal indicates a good or poor quality in general. This ambiguous signal seems to inform that there are a variety of possible outcomes when the stakeholders select the organization with reputation incongruence. Because the stakeholders use the reputation as an important signal information to identify the quality of an organization (Shapiro, 1993), this ambiguous signal may significantly affect the stakeholders' decision-making. To examine the effect of this ambiguity on the preference of stakeholders, I elaborate the concept of an ambiguity in reputation incongruence and then the reaction of stakeholder to this ambiguity.

As Ellsberg (1961) defines the ambiguity as situations where decision makers do not know the exact likelihoods of each potential event, I argue that the ambiguity derived from reputation incongruence is an *inaccurate prediction* about the overall quality of an organization because the dimensions of reputation may determine the range of prediction interval for an overall reputation. In other words, more variance among the elevations of dimensions can widen the prediction interval, resulting in more ambiguity. For more detailed explanation about how the elevation of each dimension can determine the width of interval, I exemplify three hypothetical organizations that have supposable scores in three reputation dimensions borrowed from Dollinger, Golden, and Saxton's (1997) typology of reputation dimensions: the dimensions of product quality and innovation, management integrity, and financial soundness (See Table 3). In this example, while all three organizations have the same sample mean score (i.e. overall quality), Organization A has the most congruent and the least incongruent reputation, and it sends the most certain information about the overall quality of reputation to the stakeholders; in any case, the quality is as consistent as the elevation of 5. Organization B that has an intermediate level of reputation incongruence shows increased or widened range of its possible quality as from 5 to 7 than Organization A, but narrower than Organization C. Thus, the stakeholders may consider that this Organization B's actual quality would be 5 in the worst case while 7 in the best case. When it comes to Organization B's quality, this most incongruent reputation seems to be the most confusing signal information to the stakeholders because the range is too wide (i.e., 1 to 9) to be considered as an informative signal. The mathematical estimations (calculated by square root of variance among samples divided by degrees of freedom) also show this pattern of increased ambiguity derived from the reputation incongruence: the interval of Organization A is point estimation, Organization B is ($2.69 \leq \mu \leq 7.31$), and Organization C ($0.38 \leq \mu \leq 9.62$).

Table 3. Imprecise prediction derived from reputation incongruence

		Organization A (Congruent)	Organization B (Intermediate)	Organization C (Incongruent)
Reputation dimensions	**Product quality and innovation**	5	7	9
	Management integrity	5	5	5
	Financial soundness	5	3	1
The range of overall reputation (or a set of possible outcomes)		5	$3 < \mu < 7$	$1 < \mu < 9$
Prediction interval of overall reputation (*x*): mathematical strategy (95%)		5	$2.69 \leq \mu \leq 7.31$	$0.38 \leq \mu \leq 9.62$

Jia, Luce, and Fischer (2004) also demonstrate that a within-option conflict (i.e. variance among attributes) serves as an important antecedent determining the width of a confidence interval that predicts the overall utility by using the actual laptop models in the product level, which can be applicable to the context of reputation that has multidimensionality as well. These researchers assume that the increased uncertainty and ambiguity of consumers' decision-making can be observed by the widened confidence interval derived from *larger variance* between each attribute of a laptop model. This widened interval also can be understood as the increased number of possible outcomes as Rhee, Kim, and Han (2006: 503) point out a *large variance problem* by stating "the amount of variation is positively correlated with the degree of randomness". Thus, the stakeholders may consider that an organization having reputation incongruence will randomly provide its products and services with the wide range from an exceptional superior and an extremely inferior quality.

Stakeholders are less likely to prefer this ambiguous reputation incongruence according to past literature on the topic of *ambiguity avoidance* suggesting that there is a substantial tendency of preferring an option with lower ambiguity to one with higher ambiguity (cf. Ellsberg, 1961). This tendency can be explained by the high risk of this ambiguous signal because the inaccurate prediction indicates that there is more possibility that the selection of an organization can induce an unexpected *bad* result than the stakeholders predicted (von Neumann & Morgenstern, 1953; Luce & Raiffa, 1957; Savage, 1972). For example, the overall quality of Organization C in Table 3 can be evaluated as 5 but with somehow a rough prediction range. Stakeholders usually try to avoid an extremely bad case like ending with the poorest quality (i.e. 1). Situational contingents and individual differences, like the amount of rewards and risk-taking attitude, may affect the degree of this preference for accurate knowledge which is obvious; but in general, people are risk-aversive and strive to assure that the information they obtain is accurate enough to make a confident decision with the motivation of decreasing the potential damage (Cabantous, 2007).

A study by Greenwood, Li, Prakash, and Deephouse (2005) implies this crucial disadvantage of ambiguity derived from incongruent reputation with the example of accounting firms and their relationships with clients. The incongruent reputation of an accounting firm can be revealed in the firm's provision of consulting services in various areas like financial auditing, sustainability reporting, payroll system designing, or tax reporting. Potential clients seem to consider all of these service criteria (Simunic & Stein, 1990; Trebilcock & Csorgo, 2001). If these criteria show very different quality of performances from each other, the clients may hesitate to establish a partnership with such an accounting firm with very good reputations in some service criteria but not in others (Greenwood et al., 2005). My study provides a clear explanation regarding this tendency. It may be difficult for the clients to predict the overall future outcomes from this imprecise signaling, resulting in the clients' increased concerns about possible failure in the firm's service.

Reputation incongruence as a conflicting signal

Alongside the issue of an inaccurate prediction, the reputation incongruence also can act as a *conflicting* signaling from an organization that may produce an unpleasant dissonance that should be resolved by the stakeholders. Reputation incongruence can act as this ambivalent and conflicting signal information because of the discrepancy among the elevation of reputation dimensions. Figure 3 visualizes how reputation incongruence can have more conflicts or discrepancy between its dimensions than reputation congruence. With this visualization, it is easy to recognize the increased gap between the highest elevation in Dimension B and the lowest one in Dimension C of reputation incongruence compared to the gap within incongruent reputation. This type of ambiguity is commonly referred to as a *conflict ambiguity* distinguished from an inaccurate prediction (Cabantous, 2007). Although previous literature mainly focuses on the conflict between information sources when addressing this conflict ambiguity, the main drawback of conflict ambiguity seems to be directly applicable to the internal conflict within a multidimensional reputation (Cabantous et al., 2011).

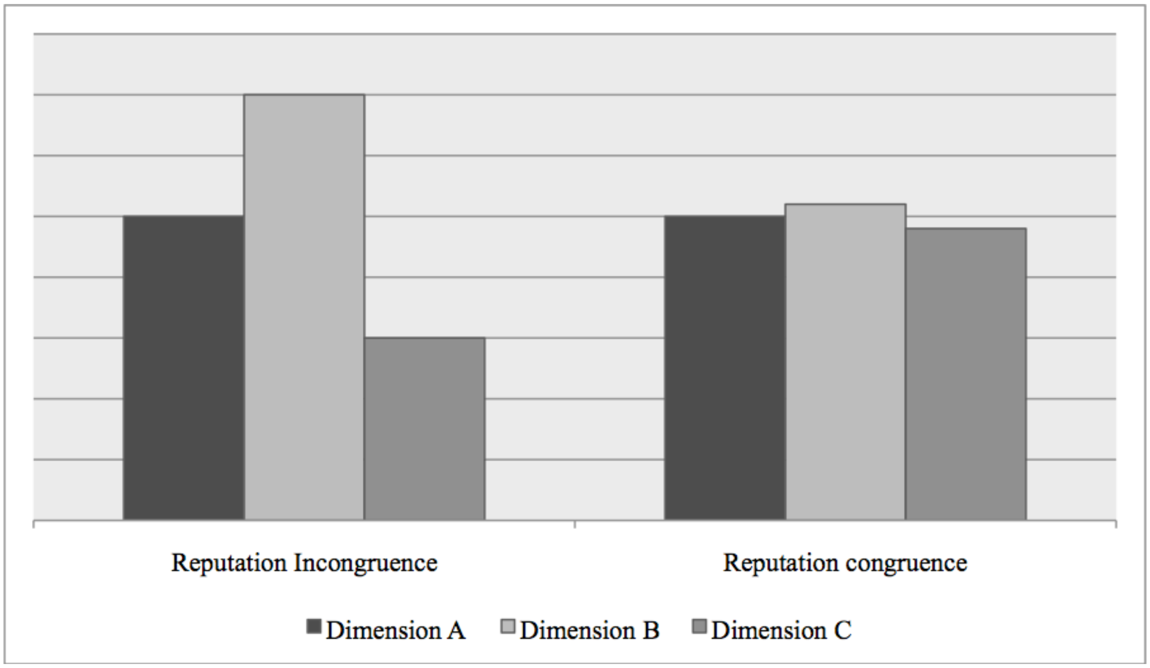

Figure 3. Comparison between reputation incongruence and congruence

This conflicting information between reputation dimensions can induce *cognitive dissonance* and the *unpleasant emotions* of decision-makers if the decision-makers are not easily able to justify reasonable consensus among this conflicting information (Smithson, 1999). The concept of sensebreaking provides an insight into how stakeholders would negatively react to this internally conflicting information in reputation incongruence. Although a seminal work by Pratt (2000) discusses the process of sensebreaking in the perspective of both internal and external stakeholders, my study highlights a view from the external stakeholders to explain the influence of sensebreaking on the external stakeholders' preference. Sensebreaking is one of the components of sensemaking while sensegiving is another, as the sensebreaking and sensegiving can be briefly described as gap-making and gap-reducing processes (Ashforth, Harrison, and Corley, 2008). Sensemaking involves the ongoing retrospective development of plausible images that rationalize what individuals or organizations are doing (Weick, Sutcliffe, & Obstfeld, 2005). Within the process of sensemaking, the idea of sensebreaking is quite straightforward. Sensebreaking generates "a meaning void that must be filled", and as the result of this void, the sensebreaking can provoke the stakeholders' cognitive needs for redefining an organization's current status and even their uncomfortable feelings about the organization (Pratt, 2000), preventing the uncomplicated sensemaking of stakeholders. In other words, the sensbreaking produces a cognitive dissonance that should be resolved by stakeholders before they decide to select an organization (Jia et al., 2004). Pratt (2010) uncovers supporting cases from his qualitative research. For example the non-members of an organization like Upline Distributors do not prefer the discrepancy or incongruent information within this organization.

This drawback of conflicting information is more likely to be aggravated because it looks barely possible to detach a single dimension from an organization, which corresponds to the argument that the reputation dimensions are an essential component of an overall reputation (Dollinger et al, 1997; Fonbrun & Shanley, 1990). The stakeholders may need to include all dimensions into their decision-making processes even if the signals are conflicting with each other and the stakeholders wanted to exclude the conflicting information to reduce their cognitive dissonance. In the context of MBA programs, the prospective students and the recruiters select a specific program as a whole package containing all dimensions, which means the stakeholders of MBA programs cannot separately select just one high elevation in a dimensions such as 'career development', and they are inevitably selecting other possibly low attribute such as 'research performance' as well. Wedell (1997) also presents an interesting hypothetical example of multi-dimensional options with this rule of package:

> *Vacation Spot A has lots of sunshine, gorgeous beaches and coral reefs, an ultra modern hotel, cold water, and limited night life.*
>
> *Vacation Spot B has average weather, average beaches, a medium-quality hotel, medium-temperature water, and an average night life.* (p. 873)

The traveler should decide either Spot A or B instead of the combination of positive dimensions of the both options. In the same manner, when a firm selects its partner of venture capital, this firm considers the candidates' three major dimensions of reputation: product quality and innovation, management integrity, and financial soundness without omitting any of these even though there can be difference in weight on each dimension (Dollinger et al., 1997). In sum, the composition of each attribute is also key information for the stakeholders' decision-making as well as the independent and individual elevation, and this paper suggests that the concept of the scatter is an important determinant of how stakeholders interpret a pattern of the composition among individual attributes.

When this mechanism of conflicting signal is combined with the previous argument about another type of ambiguity, I can propose that the reputation incongruence of an organization is an inaccurate prediction on the general performance of an organization (Guseva & Rona-Tas, 2001) and the increased cognitive gaps induced by the sensebreaking (Pratt, 2000).Then, if stakeholders perceive this ambiguity of reputation incongruence, they view the organizations with incongruent dimensions less favorably than other organizations having a congruent reputation. Jointly, these arguments suggest the following hypothesis:

Hypothesis 2: Reputation incongruence of an organization may reduce the preference of stakeholders for the organization.

Moderating Effect of Reputation Incongruence

Thus far, I discussed the reputation incongruence's direct negative effect on the stakeholders' preference above. Here, I also suggest that reputation incongruence is likely to diminish the main effect of elevation on the preference by inhibiting the stakeholders from using reputation as key information due to the *reduced reliability* of the signal information predicting the overall quality of an organization, discounting the importance of each dimension as well. As the ambiguous or unclear information derived from reputation incongruence seems to prompt the stakeholders' suspicions about the trustworthiness of the signal (Cabantous et al., 2011; Chatterjee, Kang, & Mishra, 2005; Ocana, 2008), stakeholders may try to avoid using this incongruent information when they predict the quality of an organization. Thus, if the main effect of reputation incongruence is explained by the stakeholders' suspicion about the overall quality of an organization, the moderating effect is accounted for by the suspicion about the quality of information.

The conventional idea about the reliability of measurements (e.g., Cronbach, Rajaratnam, & Gleser, 1963; Young, Biggs, Ziegler, & Meyer, 1978) is easily applicable to this argument. As more variances among items reduce the reliability of scale (Cronbach & Gleser, 1953), reputation incongruence may reduce the reliability or the trustworthiness of its signal due to its incongruent values among each dimension. A stream of research supports this linkage between mathematical reliability and reputational reliability by suggesting that the representation of ambiguous information about sellers affects consumers' reactions to this information (Chatterjee, Kang, and Mishra, 2005). According to this information-processing perspective, consumers increase scrutiny about the reliability of the information when they receive two different signals contradicting each other (Baker & Petty, 1994; Maheswaran & Meyers-Levy, 1990; Ocana, 2008). Such enhanced scrutiny makes consumers find other alternative clues rather than to focus on the signals, as the reliability of these signals is lowered (Chatterjee et al., 2005). In sum, an elevation showing reputation incongruence is not likely to be considered information that is more reliable and more objective than internally consistent reputation. Eventually, the value of the information from an incongruent reputation may be underestimated (Snow, 2010) or, in an extreme case, the stakeholders may ignore this signal from reputation. To summarize, I propose the following hypothesis based on the rationales that reputation incongruence might reduce the overall reliability of information from organizational reputation:

Hypothesis 3: The interaction effect of reputation incongruence may serve to attenuate the main effect of elevation of reputation.

METHODS

Data and Samples

The empirical context of this study resides under Global MBA programs. As Rindova et al. (2005) suggest that corporate recruiters, one of the most important stakeholders of MBA programs, heavily rely on the business schools' reputations in order to reduce the uncertainty and asymmetry of information about the quality of business school graduates because the quality of MBA graduates is difficult to evaluate before hiring (Spence, 1973). Thus, the context of my study is particularly appropriate for examining the effect of the distinct dimensions and the incongruent disposition of an organization's reputation on the stakeholders' reactions.

This study's panel data set was gathered via two major sources: *Global MBA Rankings*, which is reported annually by the *Financial times*, and *Best Business Schools*, which is also reported annually by the *Princeton Review*. The population in this study includes all MBA programs that were ranked in the top 100 lists of the *Financial times' Global MBA Rankings* reports during the period from 2003 to 2011. 73 U.S. business schools and 72 non-U.S. schools were ranked at least once within these top 100 lists at least once during this period. *Best Business Schools* by the *Princeton Review* was also used in order to add more variables into this study. Due to missing information, I will use only overlapped observations between these two major data sources. After combining two data sources, 504 observations including 69 U.S. business schools and 25 foreign MBA programs from 2003 to 2011 were used in this study.

Measures

Dependent variables. To examine my hypotheses, I employed two types of dependent variables measuring the preference of two different stakeholder groups. One measure represents the preference of recruiters (i.e. employers) revealed in recruiting behaviors and another measures refer to the preference of applicants (i.e. prospective students) for the MBA programs. First, the preference of employers as a key stakeholder group who recruits graduates from the MBA programs was measured by the first year's salary they pay the graduates because the employers are willing to pay more for the graduates from reputable programs based on their preference about the programs (Rindova et al., 2005). In particular, the *Financial times*' MBA ranking provides a weighted salary statistic that was calculated by "the average salary today with adjustment for variations between sectors" and the relative value of currencies between countries (*Financial times*, 2013). Due to the skewed distributions, I used the natural logarithm of this weighted salary. Secondly, to measure the preference of prospective students who consider enrolling in the MBA schools, I used the information of how many prospective students apply to an MBA program, which can be understood as how successfully the reputation can attract applicants. Because I also found the skewed distributions of this variable, I used the natural logarithm of the number of applicants.

Elevation of reputation. Although there are many contending publications, I selected the *Financial times* rankings to measure the reputations of business schools because this rating system includes more various attributes and a larger number of global programs in comparison to other ranking systems such as *Business Week*, the *Wall Street Journal*, *U.S. News and World Report*, and *Forbes* magazine. For example, with this

Financial times public report, stakeholders can identify rankings in career progress, aims achieved, placement success, international mobility, international experience, and the dimensions related to research performance like doctoral program and research productivity (see Table 4). Furthermore, the *Financial times* ranking system has a longer history, better name recognition, and arguably more comprehensive than other contenders (Christensen et al., 2007), providing appropriate measures for studying the multidimensionality of reputation.

Table 4. Dimensions of *Financial times*' MBA ranking report

Attribute	Description	Presumable Reputation Dimension
Career progress	"Calculated according to changes in the level of seniority and the size of the company alumni are working in now, versus before their MBA"	
Aims achieved	"The extent to which alumni fulfilled their goals or reasons for doing an MBA"	Career Development
Placement Success	"Alumni who used the careers service at their school were asked to rank its effectiveness in their job search"	
International mobility	"Based on whether alumni worked in different countries pre-MBA, on graduation and also where they are employed today"	
		Globalization
International experience	"Weighted average of four criteria that measure international exposure during the MBA"	

FT doctoral rank	"Based on the number of doctoral graduates from each school over the past three years. Additional points are awarded if these graduates took up faculty positions at one of the top 50 full-time MBA schools in previous year"	Research Performance
FT research rank	"Calculated according to the number of articles published by current full-time faculty members in 45 academic and practitioner journals. The rank combines the absolute number of publications with the number weighted relative to the faculty's size"	

To determine the major dimensions of the MBA programs' reputation, I conducted confirmatory factor analysis with the various attributes reported in the *Financial times*, based on the argument that the quality of business schools can be understood by the dimensions of research performance and effective career development (Argenti, 2000; Vidaver-Cohen, 2007) and the dimensions related to globalization or international diversity (Altbach & Knight, 2007). In other words, I presumably categorized seven attributes used in the *Financial times* ranking into three major reputation dimensions of career development, globalization, and research performance (See Table 4). Three attributes – career progress, aims achieved, and placement success – were categorized into the career development dimension while the other two attributes – international mobility and international experience – were categorized into the globalization dimension. To verify this presumable categorization, I bound the *Financial times* doctoral rank and the *Financial times* research rank as a factor in confirmatory factor analysis. CEFA 3.0 software was used for this analysis and the result revealed that each attribute is significantly loaded on its bounded dimensions (RMSEA = 0.054, $p < 0.001$) as shown in Table 5.

Table 5. Factor loading patterns of MBA program's attributes in *Financial times* (N=504)

	Reputation Dimension		
Attribute	**Career Development**	**Globalization**	**Research Performance**
Career progress	**0.53**	0.08	-0.09
Aims achieved	**0.49**	0.13	0.14
Placement Success	**0.97**	-0.18	0.02
International mobility	-0.16	**0.72**	0
International experience	-0.01	**0.53**	0.01
FT doctoral rank	0.08	0.06	**0.34**
FT research rank	0	-0.16	**0.97**

After the three dimensions of reputation had been verified, I averaged the rankings of the attributes for each dimension to calculate each dimensions' ranking score. Next, I calculated reversed indices from this score of each dimension's ranking because the lower score of ranking refers to the better reputation (i.e. being ranked in 1 means the best reputation compared to being ranked in 100), which can cause confusion during the interpretation of results. To do this, I subtracted the ranking scores from 101 since that the lowest possible ranking in my dataset would be 101. Next, I calculated the logarithm of this reversed variable likewise other variables. Thus, a dimension's reputation, D_j, of an MBA program, *i*, in the selected current year, *t*, is formally defined with the average ranking of each attribute, A_{ijk}, as follwing:

$$D_{ijt} = \log(101 - \Sigma A_{ijkt}/N)$$

Then, I calculated a composite measure by averaging the weighted elevation of each dimension, according to the regression procedure of weighting multi-attribute options (cf. Stewart & Ely, 1984; Von Nitzsch & Weber, 1993). Based on the results from pretests using GEE regression models, I identified weights for each dimension: For the preference of job applicants, the career development was weighted by the coefficient of 0.10 ($p < 0.01$), globalization by 0.05 ($p < 0.01$), and research performance by 0.18 ($p < 0.01$) while for the preference of recruiters, career development by 0.03 ($p < 0.01$), globalization by 0.04 ($p < 0.01$), research performance by 0.04 ($p < 0.01$). Thus the overall elevation of reputation, OE_{it}, could be calculated by $\sum_{j=1}^{3} w_{itj}{*}D_{ijt}$, where w_j denotes the weight. Finally, I centered OE_{it} by mean in order to avoid multicollinerity with reputation incongruence and interaction term with it (Cronbach, 1987).

Reputation incongruence. In this paper, the reputation incongruence is defined as variations among the perceived reputation of each dimension. To measure this variable, I used the coefficient of variation (V), which is "the standard deviation divided by the mean" (Lewontin, 1966), calculated from the weighted elevations of three reputation dimensions. Many organizational studies have adopted this V as a statistical measure indicating the internal variability in social groups such as top management teams, task groups, or organizations on numerous dimensions (Bedeian & Mossholder, 2000). Thus, in this study, the higher value of V denotes that eventually there will be a more scattered reputation and more incongruence in reputation. This variable was also used in natural logarithmic form, and then centered to reduce the multicollinearity with the individual values of reputation dimensions during the interaction analysis.

Control variables. I also controlled for ten other variables that may affect the preferences of prospective students or recruiters. Nine control variables were equivalently applied to both stakeholder groups while only one was to the group of prospective students. The first seven variables are related to the characteristics of MBA programs such as public/private, annual tuition, program size, geographical locations, the age of each program, and the post-graduation salary. The other three are directly connected to enrolled students' demographic information.

First, I controlled for the nationality of MBA programs because it has been discussed that U.S. higher educational programs including MBA programs are more appealing to non-U.S. employers and as students well as stakeholders in the U.S., compared to foreign MBA programs (Altbach & Knight, 2007; Altbach, 2004). I created a dummy variable indicating whether a school is located in the U.S. or not to identify this difference in nationality. 0 denotes MBA programs in foreign countries while 1 denotes programs in U.S. Second, I controlled for whether an MBA program is public or private. Resource dependence theory suggests that private schools, which are more dependent on students and businesses for resources, should devote more time and effort into MBA programs to immediately meet these stakeholders' needs (Trieschmann, Dennis, Northcraft, & Niemi, 2000). On the other hand, because public institutions have some minimum level of guaranteed state funding, they can distribute their attention to other less profitable activities than MBA programs (Trieschmann et al., 2000). Thus, I included dummy variable that denotes 0 for public school and 1 for private based on information from the *Princeton Review*.

Third, the annual tuition of the MBA programs was also included as a control variable because the students strive to maximize the difference between what they paid for their MBA programs and what they receive after graduation (Fisher, Kiang, & Fisher, 2007). Trebilcock and Csorgo (2001) also state that only the MBA programs which can guarantee future profits (i.e. post-graduation salary) for their students can impose more expensive tuition on their students. In addition, because entering the MBA programs are considered as the value-addition decision-making of the applicants, the prospect students consider the tuition as key information when they calculate their overall costs for getting the MBA degree (Fisher et al., 2007). Thus, the tuition can significantly influence the students' preference as well as the post-graduation salary. This variable was collected from the *Princeton Review* and used in natural logarithm to avoid skewness.

Fourth, the size of an MBA program can influence the preference of recruiters and prospective students because organizational size is an important factor that has been found to affect the stakeholders' perceptions and preferences of an organization (Garriga & Melé, 2004; Post, Preston, Sauter-Sachs, & Sachs, 2002) by linking the size with the organizations' higher visibility, more power, and legitimacy (Meyer & Rowan, 1977; Shropshire & Hillman, 2007). I operationally defined the size of each MBA program as the number of annual enrollments to the program by using the data of the *Princeton Review* and other supplementary sources such as program-specific brochures and web-pages. Because of the skewness, this variable was also used in natural logarithm form.

Fifth, the geographic location of business schools was controlled for because this factor influences both the students' preferences because of the living costs (Fisher et al., 2007) and the recruiters' preferences to the business schools due to the accessibility

(Safón, 2007). I created three dummy variables to control for the effect of geographical locations based on the information of four categories about the business schools' location provided by the *Princeton Review*: village, town, city, and metro.

The sixth control variable is the age of each MBA program. An organization with a long history usually has a competitive advantage over other organizations with a shorter history because of the stable membership that develops favorable relationships with other stakeholders and deepens the understanding about the complex social system (Wilkins, & Ouchi, 1983). This advantage of long history or age can be directly connected to the perception of the general audiences including the prospective students and the recruiters as Choi and Shepherd (2005) demonstrate that stakeholders tend to support an older organization as opposed to younger organizations that have more challenges of adaptation. This age variable was controlled in natural log form due to its skewness, which was shown in the *Princeton Review*.

The seventh control variable is the weighted salary reported in the *Financial times* because one of the prospective students' main concerns is how they can increase their salary after graduation (Fisher et al., 2007; Safón, 2007), I included this variable in the models using the preference of the students as the dependent variable. Because this variable was already used as the dependent variable in the models for the preference of recruiters and the correlation between current year's weighted salary and the lagged year's one was extremely high (r = 0.95), I excluded this in the latter regression models.

The eighth, ninth, and tenth control variables represent the characteristics of students in the MBA programs. Previous work experience before enrollment to the MBA programs are expected to positively associate with a higher post-graduation salary because recruiters assume that longer work experience implies more maturity and wisdom of graduate students from the MBA programs (Dreher, & Ryan, 2002). Likewise, the GMAT score is an important criterion where recruiters evaluate the quality of MBA students (Dreher & Ryan, 2002; Rindova et al., 2005). Lastly, I controlled the ratio of female students in MBA programs due to the gender differences in salary after graduation (Gerhart & Rynes, 1991; Graddy & Pistaferri, 2000) and the damaged image in the parity of the programs (Dreher & Ryan, 2002). Each observation's work experiences and GMAT scores were collected from the *Princeton Review* while the ratio of female students was from the *Financial times*. All of these variables were used in natural logarithm.

Models

If P_{it} denotes the stakeholders' preference about an MBA program, *i*, in a focal year, *t*, as a lagged response to the reputation of the programs in a previous year (t -1), I model the following equation to provide models to test my hypotheses in this study:

$$P_{it} = \alpha OE_{i(t-1)} + \beta RI_{i(t-1)} + \gamma OE_{i(t-1)}*RI_{i(t-1)} + \delta X_{i(t-1)} + \mu_{it}, \quad (1)$$

$$P_{it} = \alpha CDD_{i(t-1)} + \beta RI_{i(t-1)} + \gamma CDD_{i(t-1)}*RI_{i(t-1)} + \delta X_{i(t-1)} + \mu_{it}, \quad (2)$$

$$P_{it} = \alpha GD_{i(t-1)} + \beta RI_{i(t-1)} + \gamma GD_{i(t-1)}*RI_{i(t-1)} + \delta X_{i(t-1)} + \mu_{it}, \quad (3)$$

$$P_{it} = \alpha RFD_{i(t-1)} + \beta RI_{i(t-1)} + \gamma RFD_{i(t-1)}*RI_{i(t-1)} + \delta X_{i(t-1)} + \mu_{it}, \quad (3)$$

Here, $OE_{i(t-1)}$, $CDD_{i(t-1)}$, $GD_{i(t-1)}$, $RFD_{i(t-1)}$, and $RI_{i(t-1)}$ refer to each independent variable where *t*, the year of observation, ranging from 2003 to 2011. Specifically, OE denotes the overall reputation or elevation, CDD the reputation in the career development dimension, GD the reputation in the globalization dimensions, RFD the reputation of research performance, and RI the reputation incongruence among these three dimensions (see the measure section) while X_i denotes control variables. To estimate the parameters, I separately used recruiters' preference (i.e. log[weighted salary(*t*)]) and prospective students' preferences (i.e. log[number of application(t)]) as two different dependent variables. In other words, there were two different analyses using each dependent variable. The equations also included the interaction terms to test my hypothesis 3 and 4. The negative effect of these interaction terms would imply reduced main effects of each dimension by assuming that each reputation dimension has a positive association with the preference of employers.

The parameters of each equation will be estimated using an unbalanced panel data set with yearly time periods. Although such data can be modeled with mixed-effect estimators that analyze intra- and inter-organization variations over time, Hubbard et al. (2010) suggest that the results from mixed models can be possibly biased given the reliance on untestable assumptions on the distribution of data. Thus, I use the generalized estimating equations (GEE) model to analyze population average, which is less likely to be misled by the assumption on distribution (Liang & Zeger, 1986). This model applies the quasi-likelihood approach to the analysis of longitudinal data, which specifies the relationship between the outcome mean and covariates and between the mean and variance, rather than the full distribution of population as is required for the mixed-effects model. Instead, GEE estimators require a specification of the distribution for the dependent variable. Since dependent variables in this analysis are continuous variables calculated by natural logarithm as described above, I assume the Gaussian family or normal distribution. To account for autocorrelation among an MBA programs' observations, I adopt unstructured correlation matrices due to the difficulties in assuming the correlations.

RESULTS

Table 6 and 7 separately report descriptive statistics and correlations for variables used in the models for the preference of the prospective students and recruiters. Because of missing information for the number of applicants, the models for the prospective students group had the slightly smaller numbers of observation (N = 465) than the models for the recruiters (N = 504). Of particular interest is the negative correlation between the preference of these stakeholders and reputation incongruence, corresponding to a major hypothesis of this study. The preference of prospective students (i.e. the number of applicants) was significantly correlated with the reputation incongruence (r = -0.15, $p <$ 0.01) and the preference of recruiters (i.e. weighted salary) was also with the reputation incongruence (r = -0.26, $p < 0.01$). Among several independent and control variables, there were significant correlations, too. Especially, the reputation dimensions were correlated with many other variables. Variance-inflation factors in every regress model, however, were less than 4.60 in the models used the prospective students' preference as the dependent variable, and less than 2.17 in the models used the recruiters' preference, respectively, and any correlation coefficient did not exceed 0.80 among the variables, so that there was very little probability of a multicollinearity problem (Belsley, Kuh, & Welsch, 1980). As stated earlier, I also centered the independent variables to avoid potential multicollinearity between main effects and interaction terms (cf. Cronbach, 1987).

Table 6. Descriptive statistics and correlation coefficient in the models for prospective students (N = 465)

	Mean	S.D.	Min	Max	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1. Log(number of applicants)	2.98	0.42	1.63	3.96	1																	
2. U.S. school	0.56	0.50	0	1	0.33 **	1																
3. Private	0.45	0.50	0	1	0.32 **	0.21 **	1															
4. Village	0.06	0.23	0	1	-0.05	0.13 **	0.07 *	1														
5. Town	0.11	0.32	0	1	-0.13 **	0.11 **	-0.14 **	-0.09 *	1													
6. City	0.32	0.47	0	1	0.03	0.08 *	-0.08 *	-0.16 **	-0.24 **	1												
7. Log(annual tuition)	4.47	0.17	3.79	4.86	0.29 **	-0.11 **	0.31 **	0.09 *	-0.13 **	-0.04	1											
8. log(weightedsalary)	5.03	0.09	4.49	5.26	0.74 **	0.21 **	0.35 **	0.08 *	-0.01	0.04	0.54 **	1										
9. Log(program size)	2.21	0.32	1.48	3.00	0.67 **	0.31 **	0.39 **	-0.05	-0.14 **	-0.01	0.30 **	0.60 **	1									
10. Log(History)	0.00	0.29	-1.72	0.55	0.14 **	0.48 **	0.09 *	0.06	-0.06	0.04	-0.02	0.05	0.20 **	1								
11. Log(work experience)	0.70	0.10	0.30	1.00	-0.03	-0.61 **	-0.17 **	0.00	-0.06	-0.14 **	0.18 **	0.00	-0.16 **	-0.34 **	1							
12. Log(Femaleratio)	1.46	0.11	0.85	1.75	0.19 **	0.07 *	-0.04	-0.07 *	-0.10 **	-0.03	0.20 **	-0.01	0.18 **	0.03	0.03	1						
13. Log(GMAT score)	2.82	0.02	2.72	2.86	0.68 **	0.21 **	0.20 **	-0.03	-0.09 *	0.15 **	0.32 **	0.67 **	0.52 **	0.06	-0.09 *	0.06	1					
14. Career dimensions	0.00	0.43	-2.22	0.80	0.39 **	-0.46 **	0.15 **	-0.02	-0.11 **	-0.12 **	0.39 **	0.32 **	0.32 **	-0.18 **	0.37 **	0.03	0.32 **	1				
15. Research dimension	0.00	0.47	-2.64	0.75	0.55 **	0.15 **	0.27 **	0.05	0.04	0.02	0.28 **	0.53 **	0.47 **	0.00	-0.01	-0.07 *	0.59 **	0.47 **	1			
16. Globalization dimension	0.00	0.64	-3.36	0.83	0.19 **	-0.60 **	0.04	-0.05	-0.14 **	-0.14 **	0.33 **	0.10 **	0.14 **	-0.21 **	0.43 **	0.07 *	0.09 *	0.09 *	0.05	1		
17. Overall reptuation	0.00	0.46	-1.54	0.67	0.58 **	0.46 **	0.03	-0.04	0.01	0.12 **	0.13 **	0.42 **	0.56 **	0.20 **	-0.20 **	0.12 **	0.45 **	-0.03	0.27 **	-0.16 **	1	
18. Reputation incontruence	0.00	0.06	-0.03	0.77	-0.15 **	0.33 **	0.03	-0.01	0.04	0.14 **	-0.25 **	-0.05	-0.08 *	0.16 **	-0.27 **	-0.10 **	-0.01	-0.67 **	0.02	-0.56 **	0.11 **	1

note: *p < 0.05, **p < 0.01

Table 7. Descriptive statistics and correlation coefficient in the models for recruiters (N = 504)

	Mean	S.D.	Min.	Max.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Log(weighted salary)	5.02	0.09	4.49	5.26	1																
2. U.S. school	0.56	0.50	0	1	0.21 **	1															
3. Private	0.45	0.50	0	1	0.35 **	0.21 **	1														
4. Village	0.06	0.23	0	1	-0.08 *	0.13 **	0.07 *	1													
5. Town	0.11	0.32	0	1	-0.01	0.11 **	-0.14 **	-0.14 **	1												
6. City	0.32	0.46	0	1	0.04	0.08 *	-0.08 *	-0.08 *	-0.16 **	1											
7. Log(annual tuition)	4.47	0.17	3.79	4.86	0.54 **	-0.11 **	0.31 **	0.31 **	0.09 *	-0.13 **	1										
8. Log(program size)	2.21	0.32	1.48	3.00	0.60 **	0.31 **	0.39 **	0.39 **	-0.05	-0.14 **	-0.01	1									
9. Log(History)	0.00	0.29	-1.72	0.55	0.05	0.48 **	0.09 *	0.09 *	0.06	-0.06	0.04	-0.02	1								
10. Log(work experience)	0.70	0.10	0.30	1.00	0.00	-0.61 **	-0.17 **	-0.17 **	0.00	-0.06	-0.14 **	0.18 **	-0.16 **	1							
11. Log(Femaleratio)	1.46	0.11	0.85	1.75	-0.01	0.07 *	-0.04	-0.04 *	-0.07 *	-0.10 **	-0.03	0.20 **	0.18 **	0.03	1						
12. Log(GMAT score)	2.82	0.02	2.72	2.86	0.67 **	0.21 **	0.2 **	0.20 **	-0.03	-0.09 *	0.15 **	0.32 **	0.52 **	0.06	-0.09 *	1					
13. Career dimensions	0.00	0.47	-2.64	0.75	0.53 **	0.15 **	0.27 **	0.27 **	0.05	0.04	0.02	0.28 **	0.47 **	0.00	-0.01	-0.07 *	1				
14. Research dimension	0.00	0.46	-1.54	0.67	0.42 **	0.46 **	0.03	0.03	-0.04	0.01	0.12 **	0.13 **	0.56 **	0.20 **	-0.20 **	0.12 **	0.45 **	1			
15. Globalization dimension	0.00	0.64	-3.35	0.83	0.10 **	-0.60 **	0.04	0.04	-0.05	-0.14 **	-0.14 **	0.33 **	0.14 **	-0.21 **	0.43 **	0.07 *	0.09 *	0.05	1		
16. Overall reptuation	0.00	13.48	-36.9	35.12	0.58 **	-0.07	0.25 **	-0.05	-0.09 *	0.00	0.4 **	0.59 **	0.02	0.11 **	0.05	0.57 **	0.66 **	0.53 **	0.54 **	1	
17. Reputation incontruence	0.00	0.57	-3.57	1.23	-0.26 **	0.09 *	-0.08 *	-0.08 *	-0.12 *	-0.01	-0.07 *	-0.21 **	-0.21 **	0.18 **	-0.11 **	-0.08 *	-0.28 **	-0.37	-0.30 **	-0.40 **	1

note: *p < 0.05, **p < 0.01

Table 8 shows the results from the GEE estimates of the Equation (1) using the number of applicants as the dependent variable. In Model 1, the base model with containing only the control variables reports that locating in U.S., future salary, large size, and high GMAT score were positively associated with the 1-year lagged number of applicants while the expensive tuition and the location in town were negatively associated with the dependent variable.

Table 8. GEE estimates of the number of applicants (1), 2003–2011

Variable	Model 1	Model 2-1	Model 2-2
U.S. school	0.2622 **	0.2253 **	0.1927 **
	(0.0641)	(0.0504)	(0.0522)
Private school	0.0294	0.0266	0.0730
	(0.0485)	(0.0307)	(0.0295)
Village	-0.0773	-0.0499	-0.0517
	(0.0600)	(0.0472)	(0.0490)
Town	-0.1120 *	-0.0624	-0.0280
	(0.0573)	(0.0427)	(0.0440)
City	-0.0476	0.0535	0.1268 **
	(0.0450)	(0.0316)	(0.0319)
weighted salary	1.2450 **	1.3621 **	0.3510 *
	(0.2089)	(0.1927)	(0.1782)
Annual tuition	-0.1840 *	-0.1492 *	0.0454
	(0.0842)	(0.0631)	(0.0551)
Program size	0.1319 **	0.3068 **	0.4916 **
	(0.0337)	(0.0408)	(0.0398)
Work experience	0.1272	0.0020	-0.1253
	(0.0865)	(0.1062)	(0.1004)
Female student	-0.0748	-0.0315	-0.0882
	(0.0752)	(0.0698)	(0.0571)
GMAT	4.6125 **	4.1258 **	3.0295 **
	(0.5222)	(0.5110)	(0.4491)
History	0.0217	0.1242	0.1261
	(0.1058)	(0.0682)	(0.0669)
Overall elevation (H1)		**0.9083** **	1.2400 **
		(0.2933)	(0.2530)
Reputation Incongruence (H2)		**-0.4706** **	-0.6422 **
		(0.1422)	(0.2431)
OE X RI (H3)			**-4.0899** **
			(1.6115)
Constant	-1.6030 **	-1.5669 **	-0.8642 **
	(0.1608)	(0.1380)	(0.1291)
Wald Chi-square	289.17 **	685.11 **	711.97 **
D.f.	11	13	14
N	465	465	465
VIF	1.92	2.70	2.87

Note: *p < 0.05, **p < 0.01; Standard errors are in parentheses; OE denotes overall elevation; RI denotes reputation incongruences.

In Model 2-1, I added the effects of overall reputation and reputation incongruence to test Hypothesis 1 and 2. The positive coefficient for the overall reputation was significant ($\beta = 0.9083$, $p < 0.01$) and the negative one for the reputation incongruence also significant ($\beta = -0.4706$, $p < 0.01$), so both of the Hypotheses were supported in this analysis. In Model 2-2, I included the interaction term between the two dependent variables to test Hypothesis 3. Model 2-2 displays the significant coefficient for this interaction term with a negative direction ($\beta = -4.0988$, $p < 0.01$), which supported the prediction of Hypothesis 3. Statistically significant improvements in Wald chi-square statistics from Model 1 to Model 2-1, and from Model 2-1 to Model 2-2 also showed that adding the main and moderating effects of reputation incongruence considerably improves the fit of the models.

Model 3-1, 4-1, and 5-1 were conducted to test Hypothesis 1 by using the individual elevation of each reputation. As Table 9 indicates, each model includes a single distinct reputation dimension, which means that each model in this analysis represents Equation (2), (3), and (4) respectively. Model 2-1 delved into the effect of the career development dimension on the 1-year lagged number of application ($\beta = 0.1061$, $p < 0.01$), Model 3-1 into the effect of research performance dimension ($\beta = 0.0691$, $p < 0.01$), and Model 4-1 into the globalization dimension ($\beta = 0.2192$, $p < 0.01$), consistently supporting Hypothesis 1. More importantly, these models revealed the significant negative effect of reputation incongruence on the preference of students as Model 2-1 ($\beta = -0.4531$, $p < 0.01$), Model 3-1 ($\beta = -0.8048$, $p < 0.01$), and Model 4-1 ($\beta = -0.3698$, $p < 0.01$), supporting Hypothesis 2.

Table 9. GEE estimates of the number of applicants (2), 2003–2011

Variable	Model 3-1	Model 3-2	Model 4-1	Model 4-2	Model 5-1	Model 5-2
U.S. school	0.2669 **	0.2513 **	0.2005 **	0.2006 **	0.1641 **	0.2083 **
	(0.0537)	(0.0487)	(0.0583)	(0.0555)	(0.0485)	(0.0498)
Private school	0.0405	-0.0171	0.0799	0.0181	0.0572	0.0655 *
	(0.0353)	(0.0329)	(0.0394)	(0.0338)	(0.0329)	(0.0327)
Village	-0.0740	-0.0905	-0.0505	-0.0318	-0.0266	-0.0511
	(0.0592)	(0.0524)	(0.0660)	(0.0521)	(0.0640)	(0.0644)
Town	-0.1188 *	-0.0688	-0.1372 *	-0.0754	-0.0367	-0.0418
	(0.0509)	(0.0450)	(0.0542)	(0.0477)	(0.0434)	(0.0474)
City	0.0244	0.0161	-0.0592	0.0272	0.0295	-0.0049
	(0.0353)	(0.0317)	(0.0396)	(0.0366)	(0.0308)	(0.0337)
weighted salary	0.7535 **	1.7714 **	0.9790 **	0.9044 **	1.6104 **	1.9394 **
	(0.1797)	(0.2067)	(0.2030)	(0.1973)	(0.1855)	(0.1926)
Annual tuition	-0.1195 *	-0.1091 *	-0.2324 **	-0.1151	-0.2287 **	-0.2947 **
	(0.0500)	(0.0637)	(0.0718)	(0.0673)	(0.0582)	(0.0598)
Program size	0.4044 **	0.2453 **	0.2898 **	0.4232 **	0.2837 **	0.1855 **
	(0.0430)	(0.0431)	(0.0490)	(0.0428)	(0.0411)	(0.0449)
Work experience	0.1408	0.0328	0.4284 **	-0.1754	-0.0006	0.2889 **
	(0.1051)	(0.1113)	(0.1083)	(0.1102)	(0.1116)	(0.0917)
Female student	-0.0177	0.0253	-0.0953	0.0087	-0.0015	-0.0207
	(0.0696)	(0.0687)	(0.0699)	(0.0696)	(0.0713)	(0.0806)
GMAT	1.9973 **	0.6572	5.1378 **	2.7597 **	1.3690 **	2.3359 **
	(0.4351)	(0.4712)	(0.5966)	(0.5408)	(0.4477)	(0.5132)
History	0.0008	0.0167	-0.0884	0.0062	-0.0752	-0.0758
	(0.0797)	(0.0710)	(0.0888)	(0.0784)	(0.0724)	(0.0756)
Career Dimension (H1)	**0.1061** **	0.0743 **				
	(0.0207)	(0.0218)				
Globalization Dimension (H1)			**0.0691** **	0.0675 *		
			(0.0234)	(0.0281)		
Research Dimension (H1)					**0.2192** **	0.1993 **
					(0.0346)	(0.0354)
Reputation Incongruence (H2)	**-0.4531** **	-0.4393 **	**-0.8048** **	-0.0338	**-0.3698** **	-0.8249 **
	(0.1218)	(0.0948)	(0.1755)	(0.4020)	(0.1173)	(0.1734)
CD X RI (H3)		**-0.3954** *				
		(0.2280)				
GD X RI (H3)				**0.0013**		
				(0.1158)		
RD X RI (H3)						**-0.7934** **
						(0.1412)
Constant	-0.7100 **	-0.8077 **	-1.6946	-9.8468	-0.8737 **	-1.2810
	(0.1320)	(0.1388)	(0.1585)	(0.1464)	(0.1265)	(0.1366)
Wald Chi-square	374.83 **	433.20 **	383.37 **	399.60 **	535.60 **	561.68 **
D.f.	13	14	13	14	13	14
N	465	465	465	465	465	465
VIF	2.45	2.91	3.33	4.60	2.28	3.18

Note: *p < 0.05, **p < 0.01; Standard errors are in parentheses; OE denotes overall elevation; CD denotes career dimension; RD denotes research dimension; GD denotes globalization dimensions; RI denotes reputation incongruences.

The moderating effect of reputation incongruence was also found in Model 3-2 and 5-2 when career development ($\beta = -0.3954$, $p < 0.05$) and research performance ($\beta = -0.7934$, $p < 0.01$) dimensions were respectively selected as the dependent variable, corresponding with Hypothesis 3. I suspect that the unsupportive result in Model 4-2 may be due to the larger mean VIF (4.60) than other models and the quite high individual VIF of globalization dimension (17.60). Figure 4 illustrates the moderating effect found in Model 2-2, and the patterns of other models for prospective students were similar with this.

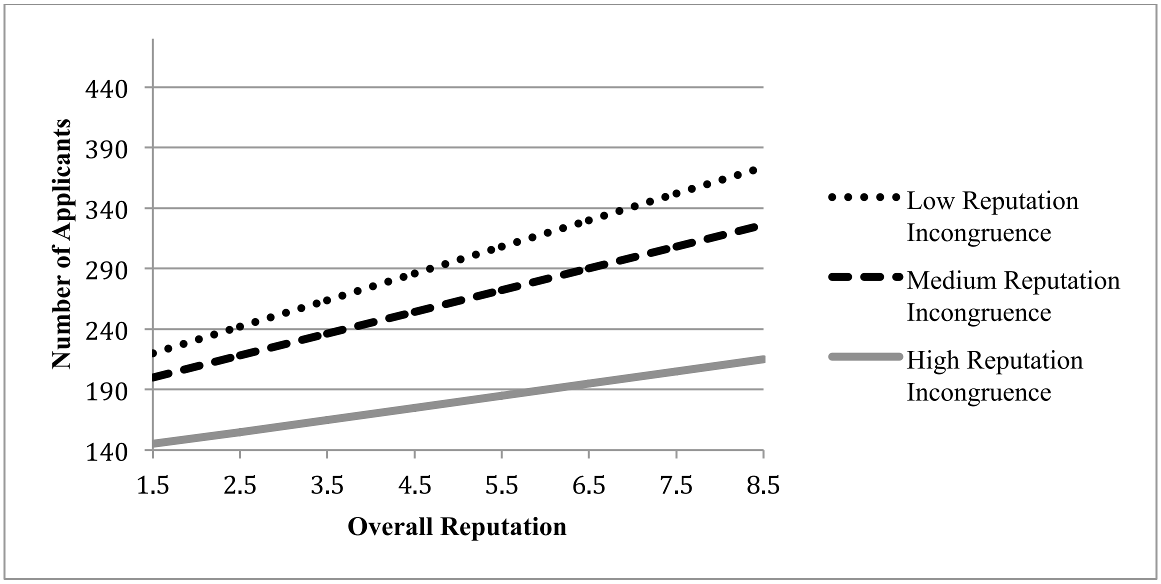

Figure 4. Moderating effect of reputation incongruence in Model 2-2

When it comes to another stakeholder group (i.e. recruiters), the structure of modeling is the same as the prospective students group. Model 6 was conducted as the base model to examine the effect of control variables on the 1-year lagged weighted salary, and Model 7-1 was used to estimate the coefficients for overall elevation and reputation incongruence. Model 7-2 was for the interaction between these two independent variables. With respect to the controls, Model 6 shows that locating in the U.S., operating as a private school, having a more expensive tuition, and possessing a longer history were significantly associated with a higher salary while schools' locations in villages and towns were in the lower salary (see Table 10). As predicted, the results in Model 7-1 and 7-2 supported Hypothesis 1 and 2 by displaying the significant coefficient for overall elevation ($\beta = 0.0014$, $p < 0.01$), reputation incongruence ($\beta = -0.0127$, $p < 0.01$), and the interaction term ($\beta = -0.0015$, $p < 0.01$). There were also the significantly improved Wald chi-square statistics between these models. Thus, the Hypothesis 1, 2, and 3 were supported in this analysis.

Table 10. GEE estimates of weighted salary (1), 2003–2011

Variable	Model 6		Model 7-1		Model 7-2	
U.S. school	0.0423	*	0.0012		0.0454	**
	(0.0208)		(0.0221)		(0.0204)	
Private school	-0.0581	**	-0.0288	*	-0.0893	**
	(0.0140)		(0.0155)		(0.0152)	
Village	-0.0280	*	0.0010		0.0236	
	(0.0148)		(0.0189)		(0.0193)	
Town	-0.0265	*	0.0072		0.0178	
	(0.0124)		(0.0142)		(0.0173)	
City	0.0034		0.0155		0.0430	**
	(0.0079)		(0.0106)		(0.0105)	
Annual tuition	0.0336	**	0.0173		0.0518	**
	(0.0119)		(0.0122)		(0.0149)	
Program size	0.0218		0.0604	**	0.0482	**
	(0.0121)		(0.0127)		(0.0120)	
History	0.0871	**	-0.0013		0.1025	**
	(0.0328)		(0.0376)		(0.0355)	
Work experience	-0.0201		0.0016		0.1012	**
	(0.0273)		(0.0242)		(0.0283)	
Female student	-0.0160		-0.0081		-0.0207	
	(0.0217)		(0.0166)		(0.0214)	
GMAT	0.0525		0.2980	**	0.0469	
	(0.1281)		(0.0961)		(0.1411)	
Overall elevation (H1)			**0.0014**	**	0.0007	**
			(0.0002)		(0.0003)	
Reputation Incongruence (H2)			**-0.0127**	**	-0.0145	**
			(0.0041)		(0.0038)	
OE X RI (H3)					**-0.0015**	**
					(0.0003)	
Constant	0.4814	**	0.5886	**	0.4774	**
	(0.0345)		(0.0274)		(0.0386)	
Wald Chi-square	57.79	**	107.48	**	165.85	**
D.f.	11		13		14	
N	504		429		429	
VIF	1.44		1.72		1.70	

Note: *$p < 0.05$, **$p < 0.01$; Standard errors are in parentheses; OE denotes overall elevation; RI denotes reputation incongruences.

Table 11. GEE estimates of weighted salary (2), 2003–2011

Variable	Model 8-1	Model 8-2	Model 9-1	Model 9-2	Model 10-1	Model 10-2
U.S. school	0.0029	0.0122	0.0728 **	0.0531 *	0.0356	0.0082
	(0.0185)	(0.0169)	(0.0227)	(0.0205)	(0.0196)	(0.0164)
Private school	0.0467 **	0.0426 **	0.0772 **	0.0271 *	0.0669 **	0.0538 **
	(0.0130)	(0.0118)	(0.0168)	(0.0142)	(0.0150)	(0.0114)
Village	-0.0055	-0.0107	-0.0128 *	-0.0138 *	-0.0114	-0.0317 *
	(0.0184)	(0.0188)	(0.0180)	(0.0180)	(0.0154)	(0.0155)
Town	-0.0105	-0.0159	-0.0252 *	-0.0299 *	-0.0156	0.0198
	(0.0147)	(0.0144)	(0.0114)	(0.0145)	(0.0130)	(0.0140)
City	0.0063	-0.0016	0.0042 *	0.0014 *	0.0076	0.0299 **
	(0.0110)	(0.0108)	(0.0087)	(0.0104)	(0.0091)	(0.0098)
Annual tuition	0.0521 **	0.0240	0.0249 *	0.0202 **	0.0175	0.0819 **
	(0.0149)	(0.0143)	(0.0108)	(0.0115)	(0.0122)	(0.0152)
Program size	0.0196	0.0180	0.0509 **	0.0245 *	0.0412 *	0.0416 **
	(0.0135)	(0.0117)	(0.0110)	(0.0112)	(0.0124)	(0.0131)
History	0.0343	0.0578 **	0.1500 **	0.1614 **	0.0796 *	0.0755 **
	(0.0320)	(0.0293)	(0.0388)	(0.0350)	(0.0334)	(0.0280)
Work experience	0.0095	-0.0453	-0.0424	-0.0429	-0.0382	-0.0088
	(0.0318)	(0.0290)	(0.0265)	(0.0235)	(0.0270)	(0.0283)
Female student	-0.0303	-0.0106	-0.0265	-0.0098	-0.0334	-0.0210
	(0.0240)	(0.0197)	(0.0240)	(0.0176)	(0.0226)	(0.0182)
GMAT	0.2194	0.2151	-0.1421	0.2212	0.1911	-0.1450
	(0.1234)	(0.1355)	(0.1223)	(0.1186)	(0.1211)	(0.0858)
Career Dimension (H1)	**0.0197** **	0.0281 **				
	(0.0069)	(0.0082)				
Globalization Dimension (H1)			**0.0170** **	0.0271 **		
			(0.0056)	(0.0071)		
Research Dimension (H1)					**0.0491** **	0.0243 *
					(0.0086)	(0.0100)
Reputation Incongruence (H2)	**-0.0088** *	-0.0178 **	**-0.0145** *	-0.0038	**-0.0167** **	-0.0103 **
	(0.0043)	(0.0049)	(0.0050)	(0.0041)	(0.0039)	(0.0039)
CD X RI (H3)		**-0.0324** **				
		(0.0096)				
GD X RI (H3)				**-0.0141** *		
				(0.0066)		
RD X RI (H3)						**-0.0259** *
						(0.0116)
Constant	0.4232 **	0.4307 **	0.5520 **	0.3276 **	0.4568 **	0.4975 **
	(0.0342)	(0.0372)	(0.0334)	(0.0325)	(0.0333)	(0.0233)
Wald Chi-square	72.46 **	112.81 **	128.19 **	142.77 **	93.06 **	128.88 **
D.f.	13	14	13	14	13	14
N	429	429	429	429	429	429
VIF	1.58	1.67	1.63	1.97	1.58	1.58

Note: *p < 0.05, **p < 0.01; Standard errors are in parentheses; CD denotes career dimension; RD denotes research dimension; GD denotes globalization dimensions; RI denotes reputation incongruences.

Likewise, the models using individual elevation of each dimension consistently supported all three hypotheses. The results of model 8-1, 9-1, and 10-1 in Table 11 display the significant coefficient of career development dimension ($\beta = 0.0197$, p <

0.01), globalization dimension (β = 0.0170, $p < 0.01$), and research performance dimension (β = 0.0491, $p < 0.01$) with supporting Hypothesis 1. These models also demonstrate the negative effect of reputation incongruence on the preference of recruiters as Model 8-1 (β = -0.0088, $p < 0.05$), Model 9-1 (β = -0.0145, $p < 0.05$), Model 10-1 (β = -0.0167, $p < 0.01$), and, supporting hypothesis 2. Model 8-2, 9-2, and 10-2 were introduced to investigate the moderating effects of reputation incongruence reducing the main effect of the organizational reputation by adding an interaction term into Model 8-1, 9-1, and 10-1, respectively. Contrary to the results from the previous models for the prospective students, these models consistently show the negative estimated values in the regression coefficient (e.g., β = 0.0324, $p < 0.01$ in Model 8-2). The negative effect of these interaction terms would imply the reduced main effects of each dimension because each reputation dimension and overall reputation has positive associations with the preference of employers, supporting hypothesis 3. Figure 5 depicts these patterns of moderating effect in the models using the weighted salary as a dependent variable.

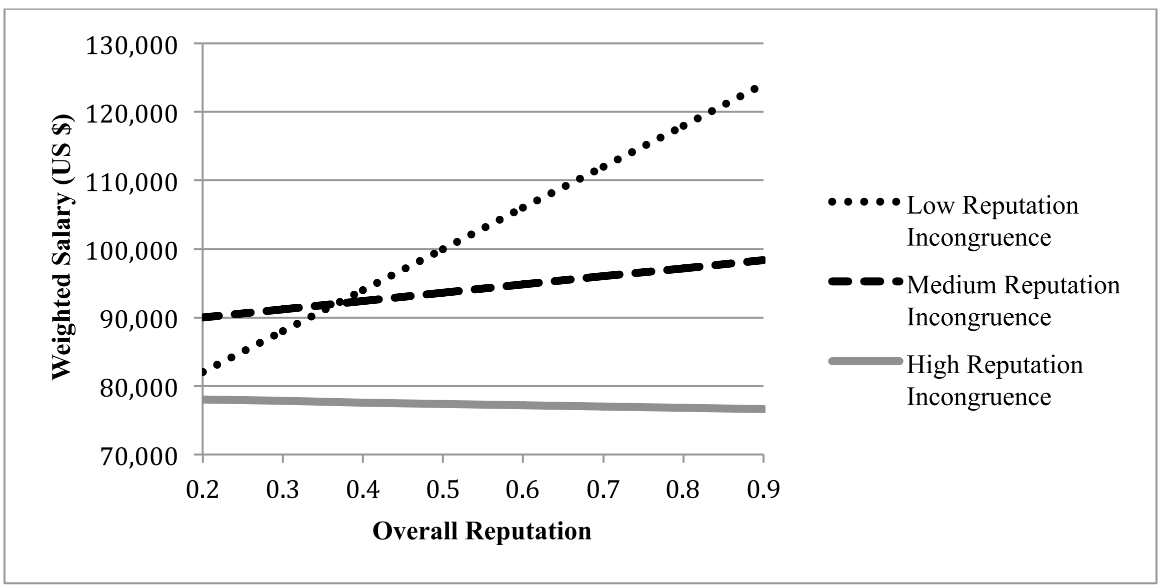

Figure 5. Moderating effect of reputation incongruence in Model 7-2

CONCLUSION

Discussion

This study examined the influence of elevation and scatter in multi-dimensional reputation that can establish the pattern of a reputation portfolio. I found the positive effects of the overall and individual elevations in each dimension on the preference of the stakeholders. Before concluding that the high elevations (or good reputations) are good, this study revealed another important determinant of favorable reputation, reputation incongruence. Even though the good reputation seems to attract key stakeholders, more variance among the elevations of dimensions can lessen the favorability of the signal. The reputation incongruence by itself not only seems to deliver the unfavorable messages from an organization to its stakeholders, but also to dilute the positive effect of the high elevations. Thus, this paper's major contribution to reputation theory is to introduce and include this concept of reputation incongruence that has been out of the picture as a key issue for academic research. Although, there have been a few publications using similar terminologies with *reputation incongruence*, most of them only examined time-based inconsistency rather than the variance among reputation dimensions. For example, Hannan and Freeman (1984) refer to the unreliability and unaccountability of an organization when this organization shows inconsistent performance or suddenly produces exceptionally poor quality products. Parker and Krause (2012) also used the term, reputation incongruence, in this context in order to describe an unusual performance of an organization compared to its past-accumulated performance. This kind of over time incongruent performance that affects the reputation of an organization has been found by the well-developed research stream of aspiration level and performance feedback (e.g., Baum & Dahlin, 2007; Greve, 1998; Lant, 1992).

Meanwhile, the major findings of this study can be addressed in the respects of two seemingly competing theories: Portfolio investment theory and diversification theory. Alongside the ambiguity issue, stakeholders may also avoid an incongruent multi-attributes option because the investment on the option seems a higher risk than a congruent one. Reputation incongruence can be interpreted as a concentrated investment portfolio that is a riskier choice than a diversified investment portfolio (Jagannathan & Ma, 2003; Jorion, 1985). Polkovnichenko (2005) demonstrates that households that own the concentrated portfolios of individual stocks are well aware of the higher risk associated with such investments compared to alternative investment products that have diversified portfolios. I reason that the high risk of a concentrated investment portfolio is linked to reputation incongruence by assuming that the stakeholders' choice of an organization with reputation incongruence is a concentrated investment on the limited numbers of reputable dimensions. Or, selecting an organization with reputation incongruence can be analogous to purchasing an investment product with a concentrated portfolio. If the concentrically invested dimension turns out to be a false signal, the investors (i.e. stakeholders) are likely to lose a large portion of their return on investments concentrated on the reputable dimensions. On the other hand, when the value of reputation is evenly distributed over several reputation dimensions, stakeholders can have backup plans even if a few dimensions fail or fall short of their expectations. Stakeholders may also easily have access to information about this reputation portfolio of an organization because many media ranking systems such as *Fortune 500's World Most*

Admired Companies, publicly report the separate rankings of each reputation dimension. From this signal information, stakeholders may be able to capture the underlying risk of the reputation portfolios presenting the reputation incongruence.

This prediction from portfolio theory seems to presumably contradict the suggestion of diversification theory (Christensen & Montgomery, 1981) arguing a firm's risk will be reduced when it practices a constrained diversification strategy that concentrates its resources on a single business sector among related businesses (Rumelt, 1974). This perspective, however, is more appropriate to the situation of when an organization expands to a new business rather than when stakeholders evaluate an existing reputation portfolio of the organization. The diversification theory suggests that managers may want to exploit their organizations' internal strengths by expanding business to related and similar sectors with the expectation of synergy between well-performing current businesses and new ones (Christensen & Montgomery, 1981). In this case, it may be a risk-aversive choice to distribute a relatively small amount of resources to a new business to avoid the enormous damage from the possible failure of the new business. However, the reputation dimensions of an organization are not business sectors that can be strategically selected or deselected by the organization. Instead, the concept of a reputation dimension is closer to a given criterion (Sauder & Fine, 2008) where all actors in the same industry should be evaluated. For example, the reputation of Apple, a computer manufacturing company, can be evaluated by the elevation and scatter of its reputation dimensions such as innovativeness, financial performance, or social responsibility while other competitors in the same industry are evaluated under the same dimensions (Fortune, 2012). Then, stakeholders can identify whether Apple has a diversified reputation portfolio or a concentrated one by considering the risk of reputation incongruence. But, this computer manufacturing company's radical decision of crossing the border to the unrelated mobile device industry (Hill & Rothaermel, 2003) does not necessarily indicate that this company has the risk of the reputation incongruence.

Although few studies clearly elucidate the definition of the reputation dimension, previous literature investigating the multidimensionality of reputation heavily relies on the theories developed in the topic of multi-attributes rather than diversification theory concerning the multi-sectors. It is easy to witness that the literature of multidimensionality consistently uses the term of "attribute" to refer to the reputation dimension (e.g., Fombrun & Shanley, 1990; McGuire et al., 1990), which suggests that there is a significant overlap between these two concepts. Rosen (2002: 6) describes workers in labor market as a multi-attribute option "prepackaged with various combinations of skills and traits [attributes], some productive and others counterproductive" and states "employers cannot detach the less desirable ones [attributes] from any single worker." Thus, reputation dimension seems to serve as an inherent attribute that can be combined and evaluated rather than an external business sector that can be selectively chosen. In the context of the MBA rankings, the sub-rankings reported by the *Financial times* are also founded on these *attributes* of MBA programs such as career development, globalization, or research performance rather than the specialized field such as accounting, marketing, operation management, or entrepreneurship.

Furthermore, the need for a clear comparison between the qualities of organizations seem to induce *universally applicable* reputation dimensions in the same industry, which means that any organization is barely free from the given evaluation criteria determined by the dimensions. As mentioned earlier, one of the key benefits of reputation is to provide transparent information to help external stakeholders overcome information asymmetry between the stakeholders and an organization (Shapiro, 1983); and the stakeholders can obtain more precise information from reputation by comparing a target organization' reputation and other contenders'. To make this comparison clearer, a universally applicable reputation dimension is necessary. In fact, organizational reputation rankings usually provide this kind of universal criteria for evaluation as the *Financial times* MBA ranking table shows only a few missing information about the sub-rankings (*Financial times*, 2013). In other words, an MBA program is unlikely to say "We don't have any career development function for our students." while it may be possible to say "We have relatively inferior career development service for our students." On the contrary, if an MBA program would not enter the field of teaching operational management, and can be exempt from evaluation of this specific field, the organizational management may not be considered as a reputation dimension. Or, a business school such as Babson College can decide to specialize its MBA program by concentrating on entrepreneurship while ignoring the course of non-profit organization (Argenti, 2000), and the entrepreneurship is likely to be a reputation dimension neither. Therefore, two major theories predicting the risk of distributing resources or investments are not likely to conflict with each other, and the portfolio theory considering the pattern of the given investment criteria is more appropriate to this study.

Contribution, Limitation, and Future Research

Compared to the previous research focusing on the overall effect of multi-dimensional reputation or the single effect of individual dimensions, I expect that my study can initiate a research stream centering the variation among reputation dimensions, broadening the scope of organizational reputation research and other research fields.

First, future research may be able to include the possible influence of the stakeholder groups' various characteristics in order to investigate the effect of reputation incongruence given that the multidimensionality is usually discussed in the perspective of multiple stakeholders such as job seekers, investors, or financial analysts (Fombrun & Shanley, 1990; Fombrun, Gardberg, & Sever, 2000). For example, while the low level of commitment in decision-making means that stakeholders spend less money, time, or effort to achieve goals from their selection (Einhorn & Hogarth, 1981), stakeholders with this low level of commitment are inclined to employ less strict and risk-taking decision-making strategies and to be less sensitive to negative information on the contrary to the key stakeholders of MBA programs (Ganzach, 1995). This decreased scrutiny under a low commitment condition provokes stakeholders to find and choose risky options with high returns instead of seeking safe options that are insured but with a low return (Ganzach, 1995; Meloy & Russo, 2004). As discussed earlier, an organization with reputation incongruence can be a risky and an ambiguous option, which means that stakeholders under a high commitment condition are more likely to be concerned with the negative or ambiguous signals from reputation incongruence than other stakeholders under a low commitment condition. Furthermore, depending on conflicting interests between different stakeholder groups, the interpreted implications of signal from an organization can be varied (Feldman & March, 1981). For example, stock investors may weigh the reputation information of financial performance of a firm while an environmental agency may ponder the firm's reputation in the social responsibility dimension. This very unique and distinct interest of a stakeholder group on a specific reputation dimension can lead to a different argument about reputation incongruence because this stakeholder group is likely to filter out less important criteria of evaluation about an organization instead of considering the multidimensionality of the reputation.

Second, the argument of reputation incongruence this paper highlights can be combined with other risk and uncertainty research topics such as the incongruence among information sources or among product lines. Likewise the reputation incongruence, conflicting information reported by various sources also can generate ambiguity when stakeholders strive to reduce the uncertainty of their choices (Cabantous et al., 2011; Chatterjee, Kang & Mishra, 2005). One of the major roles of reputation is to provide reliable information to stakeholders who are struggling to evaluate an organization's quality of products and services (Roberts & Dowling, 2002), information that can guide the stakeholders under uncertainty to the desirable outcomes (Snow, 2010). This role of reducing ambiguity is critical when stakeholders try to overcome an information asymmetry between them and an organization. Most of the products and services provided by organization are practically impossible to be accurately evaluated until these products and services are purchased and actually used by stakeholders deprived of the information derived from the reputation of an organization (Shapiro, 1982). For example, Sauder and Fine (2008) suggest that one of the most important benefits of published rankings for business schools is that the reputation reflected in rankings makes more transparent the communication between a business school and prospective students. However, if there are conflicting signals between information sources, stakeholders tend to be puzzled and the uncertainty becomes even worsen (Cabantous et al., 2011; Chatterjee et al., 2005). Cabantous et al. (2011) label this ambiguity derived from conflicting information sources as *conflict ambiguity* that denotes "each expert group provides a precise probability estimate which differs from one group to another" from *imprecise ambiguity* that refers "expert groups agree on a range of probability, but not on any point estimate".

The MBA ranking systems also connote this cause of ambiguity that was not examined in my study. Zimmerman (2001) reveals that the average correlation among these major ranking systems in the MBA industry is significant (0.46), but he argues that this correlation is not enough to confirm the validity of the various rankings. Even though the significant correlation between *U.S. News & World Report* and *Business Week* also has been consistently reported by several empirical studies (e.g., Dichev, 1999; Siemens et al., 2005), few researchers clarify the correlation among the broader range of ranking systems. The different methodologies of the ranking systems are worth noting here (see Table 1). One the one hand, *Business Week* and *The Wall Street Journal* mainly rely on their survey to calculate the overall rankings of the programs. On the other hand, *Forbes* merely uses objective data (i.e. 5 years ROI of graduates). *U.S. News & World Report*, *The Economist*, and the *Financial times* adopt both methodologies of survey and objective data. These differences can induce discrepancy among media sources (see Appendix A). Thus, one direction of future research may include and link these two types of ambiguity to the concept of reputation incongruence.

The concept of reputation incongruence also can be extended to a discrepancy in information about various product lines, increasing the suspicion about the overall quality of an organization. In the example of automobile industry, *Consumer Report* (2013) announces the best and worst car models by brands in the terms of product lines (see Appendix B). With this information, consumers and investors may be confused of predicting the quality of cars produced by Chevrolet having the most incongruent reputation in their product portfolio. This report directly points out the variation among car models produced by each automaker:

> *The test performance variation differs from brand to brand, with some brands' worst model being still doing rather well, while others span a wide range making any generalities quite misleading. Take Acura, for example. Even its worst model, the ILX, scores a 77 (out of 100) and meets our performance standards, safety, and reliability criteria to be recommended. Meanwhile, the best Jeep is the Grand Cherokee Laredo V6. It earns 71 points in our tests, six points less than the worst Acura. However, the Jeep Wrangler Unlimited marks the low point in our current ratings, scoring only a 20. The gap between best and worst can be even broader. Chevrolet, for instance, spans from the Corvette Z06 (92) to the Spark (34).*

Third, the antecedent of reputation incongruence can be an important topic for future research while my study is focusing on the outcomes of incongruent reputation. The amount of resources retained by an organization is promising the candidate for the antecedent. As an organization consumes and allocates its available resources to manage its reputation (Fombrun & Shanley, 1990; Rhee & Kim, 2012), resource allocation studies can be a theoretical backdrop suggesting the size or available resource influences the pattern of resource distribution within an organization (Moch, 1976). As Dollinger et al.'s study (1997) implies that an individual reputation dimension can be independently improved or ruined, an organization may have the choice of concentrating on a specific dimension or evenly distributing its resources among several reputation dimensions. In other words, the amount of available resources can influence the pattern of distributed resources over reputation dimensions, determining the pattern of reputation portfolio. Especially, the amount of endowment in the context of the MBA programs seems to provide an intriguing research landscape allied with this topic. Given that there is an emerging phenomenon in this industry that private schools with substantial endowments are highly ranked in media (Corley & Gioia, 2000), the endowment seems to confer pivotal resources for improving the reputation of the MBA programs. Because attracting endowments is also important role of reputation for MBA programs (Pfeffer & Fong, 2004), employing the amount of the retained endowment in future studies may allow extending my study's arguments to more dynamic models such as a loop relationship between the reputation portfolio and the endowment.

Fourth, this study selected the empirical context of MBA programs because the role of media ranking or reputation as signal information is vital in this industry. Although the environment of this industry now resembles the ones of other profit industries (Corley & Gioia, 2000) and the MBA programs, like companies in the business world, become more strategic in competition with other programs (Gioia & Corley, 2002), the findings in this empirical context need to be replicated and expanded in other empirical contexts. Some industries such as the automobile and pharmaceutical industries have reliable regulatory agencies serving as alternative information sources for stakeholders other than reputation. For example, a regulatory agency (National Highway Traffic Safety Administration: NHTSA) in the U.S. automobile industry provides information for consumers striving to resolve uncertainty in predicting the quality of cars, limiting the influence of information from reputation (Rhee & Haunschild, 2006). In addition, the reports from NHTSA mainly involve the safety related quality of cars, which means that the importance of reputation may still subsist in other dimensions such as design and reliability. Because the safety standard is imposed by governments and the automakers are supposed to meet the minimum requirements of this standard, the reputation portfolio involving this kind of regulatory dimension looks to be an intriguing topic for future study. Thus, it would be of great value to reexamine the effect of reputation incongruence on the perception of stakeholders under this presence of a regulatory agency or an industry regulation.

Beside these theoretical implications, this study also contributes to managers by providing an integrative perspective on managing organizational reputation. Because organizational reputation is an important competitive advantage of an organization (Barney, 1991) and communication channel to key stakeholders (Gray & Balmer, 1998), it needs for CEOs and managers to understand and manage the organizational reputation. It seems straightforward for managers that possessing a good reputation in one dimension or in general can improve the key stakeholders' evaluation on their organizations. But, if managers need to concurrently handle the several dimensions of reputation and to allocate limited resources across these dimensions, they need more clues than just "Good reputation is good". The implication of this study that emphasizes less variation among each reputation dimensions can provide a more complete picture of organizational reputation to managers, and also can be applicable to every activity of managing organizational reputation such as building (Roberts & Dowling, 2002), maintaining (Gray & Balmer, 1998), and repairing (Rhee & Kim, 2012) the reputation. In fact, Apple, one of the most admired companies, has developed its congruent reputation all across the nine reputation dimensions, which is reported by *Fortune* (2012). The reputation portfolios of other contenders such as Google, Amazon.com, and Coca-Cola in the list are also very similar with Apple's congruent reputation. Thus, when managers need to manage a good reputation, it may not be an appropriate approach to concentrate on one dimension in general.

The managerial contribution of this paper also can be enhanced with a typology approach to the reputation portfolio. As the attribute or the dimension of organizational reputation is sometimes analogous with the personality trait of a person (e.g., Chun, 2003; Davies et al. 2001), diagnostic tools following a typology framework like Myers-Briggs Type Indicator (MBTI) may be able to be introduced to the organizational reputation. For example, with the three reputation dimensions suggested by Dollinger et al. (1997), the eight types of organizational portfolio can be hypothetically categorized as shown in Table 12. One direction of future research for more practical and concrete contributions is to combine this typology approach with a strategy-environment fit model (cf. Hrebiniak & Joyce, 1985; Lawless & Finch, 1989). Depending on the environmental contingencies, there would be the more appropriate types of reputation portfolios. A generally accepted taxonomy by an industry is additionally beneficial because of the accumulation and communication of empirical findings with the presence of a common language (John & Srivastava, 1999).

Table 12. Hypothetical typology of reputation portfolio

Reputation Dimension			Type of Reputation Portfolio
Product quality and innovation	Management integrity	Financial soundness	
High	High	High	All-round player
High	Low	Low	Underdog manufacturer
High	High	Low	Dark horse innovator
…	…	…	…
Low	Low	Low	Patsy

APPENDIX A

Comparison among major media rankings for full-time MBA programs in 2010

	U.S. News & World Report*	Business Week*	Forbes*	*Financial times***	The Economist**
Harvard Business School	1	2	3	3	5
Stanford School of Business	1	6	1	4	7
MIT (Sloan)	3	9	14	8	19
Northwestern (Kellogg)	4	3	8	22	15
Chicago (Booth)	5	1	4	9	4
Pennsylvania (Wharton)	5	4	5	2	9
Dartmouth College (Tuck)	7	12	2	14	6
California-Berkeley (Haas)	7	10	12	28	3
Columbia Business School	9	7	6	6	20
New York (Stern)	9	13	17	13	13
Yale School of Management	11	24	10	16	27
Michigan (Ross)	12	5	18	28	25
Virginia (Darden)	13	16	9	31	24
Duke (Fuqua)	14	8	13	20	28
UCLA (Anderson)	15	14	19	33	50
Carnegie Mellon (Tepper)	16	19	23	34	33
University of Texas-Austin	16	21	11	52	49
Cornell (Johnson)	18	11	7	36	32
Washington Univ. (Olin)	19	28	41	50	65
Southern California (Marshall)	20	25	32	57	36
Ohio State (Fisher)	21	ST	39	67	45
North Carolina (Kenan-Flagler)	21	17	15	46	39
Indiana-Bloomington (Kelley)	23	15	25	57	46
Georgetown (McDonough)	24	ST	31	38	48
Minnesota (Carlson)	24	ST	26	75	62
Georgia Institute of Technology	26	29	44	NR	NR
Arizona State ((Carey)	27	ST	56	89	NR
Emory (Goizueta)	27	23	22	34	52
Univ. of Rochester (Simon)	27	ST	37	48	NR
Univ. of Wisconsin-Madison	27	NR	35	67	54
Boston University	31	ST	61	61	NR
Notre Dame (Mendoza)	31	20	38	71	34
Brigham Young (Marriott)	33	22	16	83	NR
Texas A&M (Mays)	33	NR	24	54	NR
Univ. of Washington (Foster)	33	27	40	78	31
Purdue (Krannert)	36	ST	45	54	NR
California-Irvine (Merage)	36	ST	58	72	NR
Vanderbilt (Owen)	36	30	30	57	64
Boston College (Carroll)	39	NR	46	47	NR
Rice University (Jones)	39	NR	47	44	77
Florida (Hough)	39	NR	NR	77	NR
Univ. of California-Davis	42	NR	NR	NR	NR
Illinois-Urbana Champaign	42	ST	63	52	87
Univ. of Iowa (Tippie)	42	ST	20	64	61

Note: *including U.S. programs only, **including both U.S. and non-U.S. programs, NR means not rated by the publication. ST means "second tier".

APPENDIX B

Consumers Report Best and Worst Cars By Brands (2013)

	Best	Worst
Acura	MDX	ILX (2.0L)
Audi	A6 3.0 Premium Plus Quattro	A5 Premium Plus (2.0T)*
BMW	135i	X5 35i Premium
Buick	Regal CXL (turbo)	Verano Leather (2.4)
Cadillac	CTS Premium (3.6)	Escalade (base)
Chevrolet	Corvette Z06	Spark 1LT
Chrysler	300 Limited (V6)	200 Limited (V6)
Dodge	Charger SXT Plus (V6)	Avenger SXT (4-cyl.)
Ford	Fusion SE Hybrid	Fiesta SE (sedan)
GMC	Acadia SLT2	Yukon Hybrid
Honda	Accord EX-L(V6)/LX (4-cyl.)	Insight EX
Hyundai	Genesis 3.8	Accent GLS (sedan)
Infiniti	G37 Journey (sedan)	QX 56
Jeep	Grand Cherokee Laredo (V6)	Wrangler Unlimited Sahara
Kia	Optima SX (2.0T)	Rio EX
Lexus	LS 460L	GX 460
Lincoln	Navigator Ultimate	MKS (base, 3.7)
Mazda	MX-5 Miata Grand Touring	2 Touring
Mercedes-Benz	E350 BlueTec	ML350
Mini	Cooper (base, hatchback)	Cooper Clubman
Mitsubishi	Lancer Evolution GSR	Galant ES (4-cyl.)
Nissan	370Z Coupe Touring	Versa SV (sedan)
Porsche	Boxster 2.7	Cayenne (base V6)
Scion	FR-S	iQ
Subaru	Impreza WRX STi	Tribeca Limited
Toyota	Camry Hybrid XLE	FJ Cruiser
Volkswagen	Golf TDI (manual)	Beetle 2.5L/Jetta SE (2.5)
Volvo	S60 T5	XC90 3.2

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